

## NOVITATES ZOOLOGICAE.

Vol. XI.

MARCH, 1904.

No. 1.

# NEW AMERICAN THYRIDIDAE, URANIIDAE, AND GEOMETRIDAE.

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#### FAMILY THYRIDIDAE.

#### 1. Siculodes triumphans spec. nov.

Forewing: sating white; costal area olive grey, obliquely striated with dull reddish brown, and marked in the apical half by four oblique oblong red-brown patches; basal half of wing with velvety black transverse striae between the veins, coalescing into a blotch between median and submedian veins; an oblique broad velvety black bar from before middle of inner margin, tinged with reddish below subcostal vein; between the veins this bar is marked by yellowish white horizontal streaks, and beyond cell by a round white spot which nearly interrupts it; at three-fourths of inner margin another black bar reaching vein 4; before the anal angle a series of black spots, separated by the pale veins and above vein 2 becoming bifid, reaching as far as vein 6; apical area filled with fine transverse brown y-shaped streaks between the veins; marginal area tinged with rosy; marginal line diffuse, bright rosy, with black spots at the vein-ends, running out through the pale yellow fringe.

Hindwing: with rather regular olive fuscous transverse streaks between the veins; a largish round fuscous spot above anal angle; a submarginal row of six blackish spots between the veins; marginal line and fringe as in forewing.

Underside similar; but the subcostal vein of forewing marked with a narrow line of silvery scales, and the costal edge of hindwing with numerous reddish fuscous striae.

Head, shoulders, and base of patagia brown; thorax and abdomen white, the segments of the latter marked with black at base.

Expanse of wings: 54 mm.

1 ? from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

A beautiful species, in many respects resembling pulchelloides Pag., but much larger, and distinguished at once by the yellow fringes and rosy marginal line.

#### 2. Zeuzerodes subfulvata spec. nov.

Forewing: dingy grey, ochreous-tinged, covered with dense transverse fuscous striae, without any distinct lines or markings; fringe dark fuscous.

Hindwing: similar; traces of a dark postmedian band formed of three or four dark lines.

Underside similar; but the anal angle of hindwing has the ground colour dull fulvous, and the costa of forewing from middle to apex is bright coppery orange, forming a blotch before apex.

Head, thorax, and abdomen all dark fuscous.

Expanse of wings: 40 mm.

1 ? from Bulim, N.W. Ecuador, 160 ft., January 1901 (Flemming & Miketta).

The costa of forewing is strongly insinuate in middle; the hindmargin of hindwing nearly straight.

Closely resembling Z. nigrata Warr. from the Amazons, and Z. cervinalis Pag. from Peru, but apparently distinct.

#### FAMILY URANIIDAE.

#### SUBFAMILY EPIPLEMINAE.

#### 3. Epiplema commixtata spec. nov.

Forewing: dark vinons grey, much speckled with black, especially towards base; the veins generally paler grey, black-speckled; costa with fine blackish striae; central fascia funnel-shaped, twice as broad on costa as on inner margin, suffused with vinous and brownish black along its edges; the inner edge curved above from one-third of costa to near middle of inner margin, its lower half vertical; the outer edge nearly vertical, slightly curved below costa; a red-brown black-edged blotch before the excision of hindmargin, with a smaller one above and below it; a slight submarginal shade, marked on costa and at anal angle; fringe reddish grey, preceded by a blackish line along the excision.

Hindwing: with the central fascia broader, its edges curved, the onter followed by a pale ochreous line; fringe reddish grey, greyer along base, preceded by a distinct black spot between veins 3 and 4.

Underside dull red-brown, thickly speckled and striated with black, the veins pale.

Face and palpi blackish; thorax and abdomen like wings; vertex, antennae, and anal tuft of  $\delta$  bright pale ochreous.

Expanse of wings: 26 mm.

2 & &, 1 ♀, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November and December 1901, wet season (Ockenden).

Distinguished by the ochreous vertex and antennae.

## 4. Epiplema pallifrons spec. nov.

Forewing: pale brown, tinged with lilacine, much mottled and speckled with darker; costa to first line broadly pale ochreous, with dark dots, beyond speckled dark brown and ochreous; the first line, from one-third of costa to one-third of inner margin, is sharply angled on vein 4 in the middle of the wing, finely edged inwardly with pale, broadly outwardly with brown; outer line from nearly two-thirds of costa, below which it is bent outwards, angled on veins 6 and 4, then inwardly enryed to inner margin before anal angle, with the edging of inner line reversed; a brown submarginal line parallel to hind-margin, thickened somewhat before the excision, and ending in a black blotch which occupies the anal lobe; marginal line finely pale; fringe brown with the tips paler, black at anal lobe.

Hindwing: with the veins from base finely pale ochreous; a bluntly angled outer line finely pale, broadly edged internally with brown; the basal area within it below the median pale ochreous, mottled transversely with brown; above the median a pale olive-brown streak from base along lower half of cell; the npper half marked with alternate oblique streaks of brown and whitish ochreous; marginal area brown and ochreous, containing a conspicuous white patch beyond angle of outer line; marginal line fine, white, preceded by an olive-brown, inwardly black-edged narrow band, broadly interrupted at vein 5 and narrowly on vein 4 by whitish streaks.

Underside of forewing yellowish ochreous, black-speckled; a smoky brownblack cloud before hindmargin from anal angle hardly reaching costa, and a slight dark blotch before excision; hindwing pale ochreous with brown speckles, darker between the teeth.

Face and palpi black above, ochreous below; vertex, collar, shoulders, and antennae bright pale ochreons; thorax, patagia, and abdomen greyish brown, the segmental rings narrowly pale; abdomen beneath and legs ochreons.

Expanse of wings: 32 mm.

1 ? from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

Forewing with apex depressed; hindmargin concave from 7 to 4, straight from 4 to 3, concave above and below vein 2, the anal angle strongly lobed, and the inner margin very sinuous, fringed throughout with long fine pale hairs; hindwing with costa twice excised, veins 4 and 7 with long curved tails.

Distinguished at once by the wholly pale ochreous vertex and prothorax.

## 5. Epiplema rectilinea spec. nov.

Forewing: red-brown, speckled with black; the veins pale grey, black-speckled; first line from one-fourth of costa, oblique outwards to median vein, where it is bluntly angled, then oblique inwards, bent on vein 2, to one-third of inner margin, black-brown; second line from quite two-thirds of costa nearly straight to three-fourths of inner margin; the space between the lines darker brown, especially on inner margin and towards outer line; the base of wing also darker; an indistinct darker patch on hindmargin between veins 4 and 6; fringe red-brown, darker above the middle of wing.

Hindwing: with the two lines curved; the space between rather darker from costa to vein 2; an obscurely marked submarginal series of dark specks; fringe as in forewing.

Underside dull wood-brown, with transverse dark striae; basal half of forewing and outer line darker.

Face and palpi black-brown; vertex, thorax, and abdomen like wings, but the abdomen greyer.

Expanse of wings: 22 mm.

2 33 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).

The hindmargin of forewing very slightly excised, the teeth at veius 4 and 7 scarcely visible; in the hindwing vein 7 is strongly toothed, but the tooth at vein 4 and the excision between are both inconspicuous. Antennae broken.

#### 6. Epiplema rostrifera spec. nov.

Forewing: wood-brown, tinged and striated with dark brown; lines black-brown; first, from one-fourth of costa, obliquely curved to median vein, then vertical; outer line at two-thirds, finely edged with pale, vertical to the median vein, where it is outwardly toothed, then concave to three-fourths of inner margin; a dark brown blotch before the marginal excision edged by a black bow-shaped line; fringe brown, with a paler basal line.

Hindwing: with basal area paler, but marked with darker below the median vein, the course of which is denoted by ferruginous scales; first line acutely bidentate; second line, finely edged with pale, sinuous from costa to median vein, where it forms a sharp angle, then obliquely bowed to inner margin; the included space darker; a large black spot with a pale dash above it on margin between veins 3 and 4, surrounded by ferruginous scales and preceded by a patch of dark metallic scales; fringe dark brown with a pale lustrous line at base; a largish black cell-spot.

Underside paler, with dark speckles and suffusion.

Face and palpi black-brown; thorax and abdomen concolorous with wings; antennae and anal tuft of  $\mathcal{S}$  ochreons.

Expanse of wings: 3 20 mm.; \$ 22 mm.

3 ♂♂, 2 ♀♀, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November and December 1901, wet season (Ockenden).

In the forewing the apex is truncate; the hindmargin from 7 to 6 is vertical, then slightly excised to 4, and thence straight, but not very oblique to anal angle; in the hindwing the teeth at veins 4 and 7 are acute and prominent; there is also a tooth at apex, and a slight one at the end of vein 6. The P is somewhat paler than the  $\mathcal{S}$ .

## 7. Epiplema scabra spec. nov.

Forewing: brick-red, overlaid with lilac-grey scales, and dusted with darker, the ground colour thereby assuming a very mottled appearance; between the outer and submarginal lines, reaching from costa to median vein is a hoary white space partly tinged with grey and with some dark grey speckling, and two oblique dark grey costal streaks; along the hindmargin a series of red lumnles, edged by an indistinct submarginal line, the two before the excision swelling out into a large bilobed blotch encroaching on the white apical space; the two ordinary lines are reddish and obscure; first from one-third of costa, running outwards and bent in cell, then vertical and irregular to middle of inner margin; the outer at two-thirds is mainly vertical, but angled outward on veins 6 and 4, then concave; marginal line grey; fringe rufous, varied with lilac-grey.

Hindwing: like forewing, with a broad central band, slightly darker red, and edged outwardly by a paler line, bluntly rounded on vein 4; basal and costal areas paler; a dark spot below lower tooth; veins towards hindmargin pale, with black speckles.

Underside brick-red, coarsely black-speckled and striated: the forewing with all the three margins broadly grey and the fringe bright rufous; the hindwing less broadly grey-edged,

Face and palpi black; vertex and base of antennae dull rufous, rest of antennae grey; shoulders and patagia pale, whitish grey; thorax and abdomen darker grey.

Expanse of wings: 26 mm.

1 ? Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

Forewing with apex truncate, hindmargin vertical from vein 7 to 6, both being slightly toothed, deeply excised to 4, which is strongly toothed, then oblique and crenulate to anal angle which is shortly lobed, the inner margin shallowly excised before it.

Hindwing with costa sinuate, strongly shouldered at apex, and produced at vein 7; 7, 6, and 4, all toothed; otherwise the margin is more or less straight from 7 to anal angle.

#### 8. Epiplema vulpecula spec. nov.

Forewing: pale brick-red; the black-speckled costa and edges of central fascia tinged with pale grey; all the veins greyish and conspicuously marked with blackish dots; lines much as in E. scabra, described above; marginal lunnles very obscure; the outer line followed above middle by a narrow lilacgrey fascia; fringe rufous (worn).

Hindwing: like forewing, with the central fascia very indistinct, but marked on inner margin by a pale blotch; a brown-black submarginal spot below lower tooth.

Underside of forewing fulvous ochreons, coarsely black-speckled, the costal and hindmargins paler, less fulvous; hindwing paler, with only the hindmargins fulvous, containing a blackish submarginal cloud towards anal angle.

Face and palpi black; vertex and antennae pale rufons ochreous; shoulders, patagia, thorax, and abdomen grey, the abdomen tinged with rufous.

Expanse of wings: 30 mm.

1 ? from Santo Domingo, Carabaya, S. E. Peru, 6000 ft., December 1901, wet season (Ockenden).

Evidently closely allied to E. scabra, and also to E. draco Warr. from Bolivia, the outline of the wings being the same in all three species.

## 9. Hemioplisis? alternata spec. nov.

Forewing: dull purplish grey, darker towards inner and hindmargins; an obscure dark transverse shade near base; first line from one-third of inner margin, straight and oblique towards apex, acutely angled on vein 4 and retracted to costa; a curved line from middle of inner margin, concave outwards, angled on vein 7 and retracted to costa; a dark slightly sinnous submarginal line, bent to costa before apex; before this line, which is followed by a dark cloud, an oblique cloudy shade slopes towards apex, becoming obsolete above middle; fringe concolorous.

Hindwing: with basal grey area crossed by two straight parallel dark lines; outer half of wing coarsely and closely speckled with black, the ground colour towards hindmargin becoming fulvous.

Underside of forewing sprinkled with ferruginous and fulvous, the hind-margin grey beyond the dark submarginal line: hindwing dull whitish grey, speckled with darker, and tinted with fulvous towards margin.

Face and palpi black; thorax and abdomen purplish grey.

Expanse of wings: 22 mm.

1 9 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., January 1902,

wet season (Ockenden).

Probably not really referable to *Hemioplisis*: the costa is arched and the apex blunt, the hindmargin being shortly truncate to vein 7, which minutely projects in place of the true apex, the hindmargin thence being sinuate; the hindmargin of hindwing likewise projects, but very bluntly, at vein 7. The neuration is normal; vein 5 from upper end of discocellular; 6 and 7 stalked; 8 and 9 stalked.

#### 10. Hemioplisis metallica spec. nov.

Forewing: dark chocolate brown, covered with exceedingly fine bluish grey striations; the lines very indistinct, dark brown, edged by a very fine line of bluish grey scales; first from one-third of costa to about one-fourth of inner margin, broadly outcurved in the middle of the wing; second from three-fifths of costa to three-fifths of inner margin, similarly outcurved between veins 4 and 6; marginal area below middle lightened by broader bluish white striae, with a round white spot on each side of vein 3, one obliquely below the other; fringe dark brown; veins towards margin deep ferruginous.

Hindwing: with the two lines, antemedian and postmedian, near together, the space between them slightly darker; costal area dull greyish ochreous; the ferruginous veins ending in a deep ferruginous marginal line, preceded by a broad line of plumbeous scales cut up into dashes by the veins; between veins 3 and 4 before the hindmargin a boss of plumbeous scales edged with black and flanked by very fine black and yellow striae; fringe dark.

Underside dull grey brown; costal area of forewing diffusedly ochreous; the subapical hindmargin dark-brown; the two submarginal spots white.

Face and palpi dark brown, ochreous beneath; antennae ochreous, the shaft narrowly grey above; vertex, thorax, and abdomen brown with grey dusting; abdomen below ochreous; legs ochreous and grey.

Expanse of wings: 30 mm.

1 ? from Trinidad.

Differs somewhat from the other species: the hindmargin of forewing, after the inflection below the shortly falcate apex, is strongly gibbons throughout; on the other hand the hindmargin of hindwing is nearly straight, the apical angle rounded, the anal angle sharply rectangular; the palpi are quite short.

## 11. Leuconotha persordida spec. nov.

Forewing: dull dirty grey; all the veins blackish; faint traces of a smoky dark antemedian and postmedian shade; fringe grey.

Hindwing: similar, the veins equally dark; cell-spot plainer.

Underside with the veins finer; a small black spot before margin of forewing between veins 6 and 7.

Face, palpi, vertex, and anal tufts, white; thorax and abdomen grey; shoulders and patagia sometimes quite pale.

Expanse of wings: 26 mm.

3 &d from Chulumani, Bolivia, 2000 m., December, beginning of wet season (Simons).

#### Lophotosoma gen. nov.

3. Forewing shaped as in *Thysanocraspeda*; hindwing triangular, the hindmargin nearly straight, irregularly waved, the abdominal margin swollen, lobed and contorted beneath at anal angle, the hollow beneath lined with rough scales; costal margin bisinuate.

Pennltimate segment of abdomen armed with lateral tufts of hair, erect

and meeting above the dorsum. Neuration of Epiplema.

Type: Lophotosoma ustanalis spec. nov.

#### 12. Lophotosoma ustanalis spec. nov.

Forewing: lavender grey, speckled with black and suffused with darker gre in places, and varied with vinous red streaks between the veins; an oblique red line from costa at one-third to median vein appears to form with an inwardly oblique red line from two-thirds a costal triangle; in the dark grey hindmargin three short red streaks between the veins precede the excision; and there are traces of a series of dark spots forming a submarginal line, ending in a dark grey patch at anal angle.

Hindwing: ferruginous red, black-speckled; a central fascia with darker edges; a black dot before hindmargin between veins 3 and 4, and a black patch

at anal angle, as if it had been burned.

Underside of forewing reddish, streaked with black, the basal area blackish; of hindwing grey, tinged with reddish towards apex only.

Face and palpi black; vertex reddish; thorax and abdomen grey; the tufts on abdomen pale ochreous.

Expanse of wings: 22 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).

The unique specimen is somewhat worn and the fringes are destroyed; but the lobed hindwing and pale abdominal tuft will serve to distinguish it.

## Morphomima gen. nov.

Forewing: with costa curved throughout; apex produced, subfalcate;

hindmargin oblique, with a faint bulge at middle.

Hindwing: with apex squared; hindmargin straight to vein 4, slightly toothed at veins 2, 3, 4, excised below 2; the inner margin short. Palpi slender, porrect, reaching well in front of face; antennae of 3 thick, with close curved serrate teeth, as in Coclura.

Neuration: forewing, cell less than half of wing; discocellular oblique inwards; the subcostal and median veins inflexed towards end, the latter strongly; first and second median nervules short-stalked from the bend, third from the upturned end; 5 from just below upper angle of cell; 6, 7 stalked from the angle; 8, 9, 10 stalked; 11 free; hindwing of  $\delta$ : cell very short, the subcostal vein arched; vein 7 before end, 5 from near upper end of the oblique discocellular; 3, 4, from the lower end of cell, 2 shortly before end.

Type: Morphomima fulcitacta spec. nov.

Agrees with Coelura Warr, in structure of antennae and in character of markings, and with Meleaba Wik, in shape of wings.

## 13. Morphomima fulvitacta spec. nov.

Indistinguishable from Coeluromima subjasciata, except by the presence of some fulvous scaling below costa at the angulation of the outer line. The difference in the antennal structure will separate it from subfasciata as well as the contour of the hindwings, which is that of Syngria.

Expanse of wings: 35 mm.

1 & from Colombia.

#### Neodirades gen. nov.

Differs from *Dirades*, the Old-World genus, in the following points:—vein 11 of forewing rises far back near base and anastomoses strongly with 12; vein 5 from just above middle of discocellular; vein 1 is swollen and bent near base, with a small fovea below the bend in both sexes. In the hindwing the inner margin of the 3 is folded and furrowed, but lacks the pencil of hairs.

Type: Neodirades sparcata spec. nov.

#### 14. Neodirades spurcata spec. nov.

Forewing: greyish white, coarsely black-speckled; a darker central fascia with curved edges, twice as broad on costa as on inner margin, limited by a paler, more whitish, area; an interrupted blackish streak from apex to anal angle; a dark marginal line; fringe dark.

Hindwing: similar in 9; in the 3 the whole wing above vein 5 is white, crossed by a dark outer line; the inner marginal half being much blacker.

Underside dark grey, paler in hindwing.

Head, thorax, and abdomen blackish.

Expanse of wings: & 17 mm.; \$ 19 mm.

A pair from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

## Saccoploca gen. nov.

3. Forewing: ample, triangular; costa faintly curved, becoming strongly convex at apex; apex depressed, minutely acute; hindmargin long, incurved just below apex, then slightly oblique and convex; anal angle rounded; inner margin convex, about as long as outer margin. In the ? of the type-species the hindmargin of forewing is excised between veins 4 and 7.

Hindwing: with apical angle rounded, anal angle rectangular; inner margin in  $\mathcal{S}$  largely folded over underneath, concealing a mass of flocculent scales; the whole of the onter margin up to the fringes clad beneath with rough mealy scales; a semi-transparent fovea at base of cell. In the  $\mathcal{P}$  the hindwings are simple. Palpi porrect, not reaching beyond face; third segment slender, distinct; antennae subserrate, laterally flattened in the  $\mathcal{S}$ , lamellate in the  $\mathcal{P}$ ; tongue and frenulum present.

Neuration: forewing, cell not half as long as wing; discocellular vertical; first median at two-thirds, second at five-sixths; vein 5 from upper angle of cell; 6, 7 stalked from the same point; 8, 9 stalked from two-thirds, 10 just before them; 11 from one-third, bent up towards 12; hindwing with 3, 4, and 6, 7 stalked.

Type: Saccoplaca excisa spee, nov.

#### 15. Saccoploca consimilis spec. nov.

The  $\delta \delta$  of this species are exceedingly like those of S. excisu, but smaller; the forewing is narrower, slightly more falcate, and the hindmargin more oblique and sinuous; the cross-lines finer on both wings; the anal segment of the abdomen is ochraceous, and on the underside the hindwing is often ochraceous towards the hindmargin. In the  $\mathfrak P$  the hindmargin of forewing resembles that of the  $\delta$ , having no trace of excision; the ochraceous tint of the underside is still more noticeable than in excisu.

Expanse of wings: 3 30-35 mm.; ? 35 mm.

5 & d, 5 & R, from Sauto Domingo, Carabaya, S.E. Peru, 6000 ft., November and December 1901, wet season (Ockeuden).

#### 16. Saccoploca excisa spec. nov.

3. Forewing: dark brownish purple, when fresh thickly dusted with fine bluish white scales, which are densest along inner edge of central area, towards the anal angle, and along the veins towards hindmargin; lines deeper purple: first from one-fourth of costa, oblique outward, roundly bent in cell, then parallel to hindmargin to inner margin at one-third, emitting sharp spurs ontwards on the folds; outer line from three-fourths of costa to two-thirds of inner margin, parallel throughout to hindmargin, but faintly bent outward on the median vein, finely edged with a bluish white line; an oblique purple shade from just before apex to vein 4, then retracted towards margin and becoming obsolete; fringe purple.

Hindwing: with costal region pale pinkish ochreous, the rest purple-brown, powdered with white scales towards anal angle, with the two lines running only across the cell.

Underside dull cinereous, with transverse darker striae towards costa; costal area of forewing, especially towards apex, ochraceous; fringe of hindwing ochraceous; the rest of the rough hair grey; scales within the fold ochraceous.

Head, thorax, and abdomen purple-brown.

The  $\mathfrak P$  of this species has the hindmargin of the forewing excised between veins 7 and 4, and in general appearance is much browner, less purple, than the  $\mathfrak Z$ , the underside of both wings being bright ochraceous with dense brown striations; on the upperside the bluish white scales are denser towards the ends of the veins and along the marginal line.

Expanse of wings: 40 mm.

7 & d, 3 & P, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November and December 1901, wet season (Ockenden).

## Thysanocraspeda gen. nov.

This name is proposed for a group of South American Epipleminae, of which the  $\delta \delta$  have a spreading pencil of hairs from the abdominal margin of the bindwing. At the base of the cell of the same wing is a small fovea-like semi-transparent spot. The space between the median vein and vein 1 is compressed, forming a furrow beneath. This furrow in most cases bears patches of rough mealy scales. In the forewing the hindmargin is bluntly toothed at vein 4 and 7, with a slight excision between; the hindwing is strongly toothed at vein 7, and very slightly toothed at vein 4. Neuration as in Epiplemae.

Type: Thysanocraspeda semicastanea spec. nov.

Erosia ochodontaria Suell, must be referred here. The group seems largely developed in S.E. Peru.

#### 17. Thysanocraspeda geminipuncta spee, nov.

Forewing: pinkish brown, with a few blackish speckles; the central fascia tinged with olive-brown; its inner edge, dark brown, runs from one-third of costa to one-third of inner margin, strongly but bluntly angled on the median vein; outer edge from two-thirds of costa is angled above the middle, then incurved, approaching the inner edge on the submedian fold, then again ontcurved; both are marked above the submedian vein by an oblong velvety black blotch, and some smaller black spots below it; a dark cloud at anal angle; a thick velvety black line before the excision of forewing, with a black spot above it; fringe brown, marked with black at the base beyond the black line.

Hinduring: darker red-brown, the base and inner margin to vein 2 pinkish ochreous; the central fascia darker, with its blackish edges running through to inner margin, each with a blackish spot on vein 2.

Underside of forewing duller red, with dark transverse striae and traces of the lines: hindwing grey, reddish only along costal third; the furrow, as in *T. squamiplaga*, containing an oval patch of rough ferruginous scales followed by patches of rough grey scales, which also cover vein 2: the tuft of hair on inner margin yellow.

Face and palpi blackish; vertex, thorax, and abdomen pinkish ochreous.

Expanse of wings: 22 mm.

3 & &, 1 \, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November and December 1901, wet season (Ockenden).

## 18. Thysanocraspeda inornata spec. nov.

Forewing: uniform dark grey, speckled with darker; a brown lumulate mark inwardly black-edged before the excision of bindmargin; in the 2 specimen there are traces of a slightly darker central fascia, the outer edge of which is nearly vertical and toothed on the median vein, and the inner edge curved; fringe grey, darker along the excision. Anal angle with a patch of rough scales which extend linearly along the submedian vein and vein 2, which is deflected.

Hindwing: wholly dark grey.

Underside paler grey; the furrow of hindwing and the space below vein 2 thickly beset with rough grey scales; the tuft on inner margin pale yellow. Face and palpi black; vertex, thorax, and abdomen grey; anal tuft of 3 whitish.

Expanse of wings: 20-22 mm.

3 & & , 1 \, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

## 19. Thysanocraspeda semicastanea spec. nov.

Forewing: of the same size and shape as the next species, Th. squamiplaga, but with the ground colour brighter, more lilac-grey; the markings paler chestnut, not mixed with blackish scales; the central fascia more vertical, twice as broad

in the narrowest part, the basal indentation being less pronounced, and the outer edge nearly vertical or slightly bent on the median vein; much less interrupted by the ground colour towards costa; the marginal chestnut patch much larger; no bed of rough scales at the anal angle, but the space beyond central fascia traversed throughout by a darker grey diffuse shade.

Hindwing: as in squamiplaga, but the two teeth more strongly marked, the lower one, at vein 4, with a black dot at its base; the tuft of hair on inner margin concolorous grey, not yellow; the fringe grey to vein 2, above it chestnut.

Underside dark grey, black-speckled, on the forewing tinged with reddish; the furrow of hindwing without abnormal scales, the cell with no basal fovea. Head and palpi black; thorax and abdomen pale grey.

Expanse of wings: 26 mm.

4 ♂♂, 5 ♀♀, from Santo Domingo, Carabaya, S.E. Peru, November and December 1901, wet season, 6000 ft. (Ockenden).

#### 20. Thysanocraspeda squamiplaga spec. nov.

Forewing: pale slaty grey, with a few blackish speckles; the markings dark chestnut; central fascia broadest on costa, narrowest below the middle; the inner edge strongly incurved in middle, running from about one-third of costa to one-third of inner margin, the outer bluutly angled on veins 6 and 4, then concave; in the lower half of this fascia the chestnut is mixed with black, and in the upper half more or less overrun by the grey of the ground colour; a large rounded chestnut patch on hindmargin from vein 6 to 4, or below 4, with a small patch above 6; a small bed of rough, semi-erect, dark grey woolly hairs at anal angle; fringe chestnut.

Hindwing: with basal area and inner margin, as far as median vein and vein 2, grey, the rest dark chestnut; the central band slightly darker and mixed with blackish, edged outwardly by a somewhat paler line, bent outwards at middle; fringe dark chestnut from apex to vein 2, then yellowish; tuft of the inner margin bright yellow.

Underside dull grey, speekled with black; the fringes reddish; the furrow between vein 1 and the submedian fold with a large oval patch of mealy, rust-coloured scales, followed towards margin by rough mealy grey scales, which also extend along the submedian fold itself.

Head and palpi black; thorax and abdomen grey.

Expanse of wings: 25 mm.

2 ਰੱਟੇ from Santo Domingo, Carabaya, S.E. Peru, November and December 1901, wet season (Ockenden).

Forewing bluntly angled at veins 4 and 7, with a shallow concavity between; hindwing strongly toothed at vein 7, slightly at vein 4, the anal angle rounded; costa sinuous, the basal shoulder rough-haired; the base of cell with a small oval semihyaline spot. Antennae with close curved clavate teeth. The species agrees in many points, especially in the yellow tuft of hindwing, with E. ochodontaria Snell.; but as that writer makes no mention of the rough scales on forewing above and hindwing below, nor of the basal fovea, I am obliged to consider it distinct.

#### FAMILY GEOMETRIDAE.

#### SUBFAMILY OENOCHROMINAE.

#### Entogonia gen. nov.

Forewing: triangular; costa nearly straight, depressed at apex; hindmargin oblique, hardly curved; inner margin somewhat convex.

Hindwing: with rounded hindmargin; both angles well marked, the apical rounded, the anal rectangular; inner margin at two-fifths with an angular fringed projection.

Abdomen (3) short, not nearly reaching anal angle of hindwing; antennae ciliated; palpi porrect, second segment thick, rough-scaled, terminal segment small, depressed; tongue present; freunlum very fine; hindtibiae dilated, with a large peneil of hairs and four spurs.

Neuration: forewing, cell half as long as wing; discocellular slightly concave outwards; first median nervule just beyond middle, second near before third; radials normal; 7, 8, 9, 10 stalked from well before end of cell; 11 out of 12, anastomosing with 8, 9, 10: hindwing, discocellular oblique, the radial from the centre; costal approximating to subcostal shortly near base; veins 3 and 7 before angles of cell.

Type: Entogonia schistacea spee. nov.

#### 21. Entogonia schistacea spec. nov.

Forewing: pale slate-colour; the lines pale; first very indistinct, from one-fourth of costa to one-third of inner margin, curved, plainer below middle; second at two-thirds, roundly bent outwards beyond cell, then parallel to hind-margin; a faint pale cell-spot; a faint waved whitish submarginal line; fringe concolorous, with a very fine black basal line, thickened into dots between veins towards apex.

Hindwing: with postmedian and submarginal lines, both more distinct; the black basal fringe line preceded by a whitish line.

Underside paler, the markings faintly showing through; cell-spots dark, indistinct.

Head and palpi dark brown; thorax and abdomen like wings.

Expanse of wings: 30 mm.

1 & from San Ernesto, Bolivia, 1000 m., August, September 1900 (Simons).

## Leucoreas gen. nov.

Forewing: ample; costa slightly curved; hindmargin hardly oblique.

Hindwing: ample; hindmargin curved; both angles prominent, rounded.

Antennae simple, subserrate, pubescent; palpi short and stout; forehead protuberant; tongue and frenulum both well developed; hindtibia with four spurs.

Neuration: forewing, cell nearly half as long as wing; discocellular oblique, concave; first median nervule just beyond middle, second at seven-eighths; radials normal; 7, 8, 9, 10 stalked from the bend in subcostal; 11 free, anastomosing with 12, 10 anastomosing with 11, and again with 8, 9: hindwing, costal and subcostal

approximating shortly, but not touching near base, 7 from before end of cell; radial from centre of discocellular; medians as in forewing; inner margin between vein 1 and the submedian fold containing a furrow lined with rows of hairs.

Type: Leucoreas rhodosticta spec. nov.

#### 22. Leucoreas rhodosticta spec. nov.

Forewing: glossy white, with three straight pale brown bands crossing the wing; first from one-third of costa to beyond middle of inner margin; second from about two-thirds of costa to three-fourths of inner margin; third from five-sixths of costa to just before anal angle; fringe white.

Hindwing: with two bands, median and submarginal, starting from vein 6, and curving into inner margin above anal angle.

Underside of forewing with the two onter lines represented by rosy spots on the veins, the inner faint, the outer with the spots large and distinct; base of cell and costal area tinged with rosy: hindwing with the outer line of spots and the hairs of the fold on the inner margin rosy.

Collar, vertex, face, and the fore-femora deep rosy; face below white; palpi dark fuscous; foretibiae and -tarsi dark fuscous with the joints white; thorax, abdomen, and other legs white.

Expanse of wings: 52 mm.

2 33 from Chulumani, Bolivia, 2000 m., January 1901, wet season (Simons). 1 \( \text{from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., January 1902, wet season (Ockenden).} \)

## 23. Pycnoneura turpis spec. nov.

Forewing: dull iron-grey; two transverse bands dull olive-brown, edged on both sides by a whitish lumulate line, which in fresh specimens is probably silvery; the first near base, ontcurved; the second at two-thirds, sinuous, incurved beyond cell and again on the submedian fold; the marginal area beyond it dull brownish, except at costa and on inner margin; submarginal line indistinct, whitish towards costa, darker below; fringe brown with base a little paler; a round brownish discal spot.

Hindwing: with the second band central; the apex only brownish; the submarginal line pale, but obscure, throughout.

Underside dull cinereous.

Head and palpi black-brown; thorax and abdomen like wings; abdomen below pale brownish.

Expanse of wings: 44 mm.

1 & from San Ernesto, Bolivia, 1000 m., Angust—September 1900 (Simons).

This species, both as regards shape of wings and markings, might well be identical with Lagyra?! dentilineata Wlk. xxvi. 1486 from Rio Janeiro, the type of which, from the Fry Collection, should be in the Oxford Museum, but which was not identified by Mr. Schaus (cf. Pr. Z. S. 1896. p. 646); but Walker says that the antennae of his insect are rather broadly pectinated, whereas the antennae of the present species are shortly ciliated. It would seem that Walker had more than one specimen before him, as he gives the expanse of wings 16 to 18 lines.

#### SUBFAMILY MECOCERATINAE.

#### 24. Phellinodes interrupta spec. nov.

Like *P. hedylaria* Guen. and *conifera* Warr., but the large white triangular spot broken up by the fuscous shading into a double costal flattened blotch and a white blotch below it; the costa from base whitish, becoming broadly white at middle.

Expanse of wings: 52 mm.

1 ? from S. Javier, R. Cachabi, Ecuador (Flemming and Miketta).

#### 25. Phellinodes obstructa spec. nov.

This species is likewise closely related to *P. hedylaria* Guen., but the large white triangular blotch is still further reduced than in *P. interrupta*, and forms merely a flattened costal mark; costal edge narrowly white, and forming a second flattened whitish blotch in the middle of wing; the outer margins of both wings darker.

Expanse of wings: 52 mm.

1 & from Pambilar, Ecuador (Flemming and Miketta).

#### 26. Phellinodes uniformis spec. nov.

Forewing: brownish grey, rippled with darker; the costal area of the same tint throughout as the rest of wing; before the reddish brown apical area a crescent of three small white spots, the middle one only slightly larger than the other two, roughly lunate.

Hindwing: brownish grey, with slight striation.

Underside like upper; the apical area paler, especially externally.

Head, thorax, and abdomen like wings.

Expanse of wings: 42 mm.

1 & from R. Napo, E. Ecuador, February 1900 (Haensch \*)

#### SUBFAMILY CYLLOPODINAE.

#### 27. Campylona contingens spec. nov.

Forewing: rather deep yellow; the costa and apical half of wing black; the yellow basal area forming a triangle tonching inner margin; apical area containing two yellow blotches; the first elongate, just beyond middle, almost touching costa and rounded before anal angle; the second, semilunate, towards apex, its ends equally distant from costa and hindmargin; fringe black.

Hindwing: yellow, with a broadish black marginal border from costa before apex to anal angle, somewhat bulging in middle of wing.

Underside the same.

Face and palpi below yellow, above black; vertex, shoulders, and patagia black, with the centre of first and bases of the two last yellow; abdomen yellow, with black dorsal and fine lateral lines, all plain only towards and extremity; abdomen beneath and legs yellow; forelegs fuscous in front.

Expanse of wings: 39 mm.

<sup>\*</sup> The part of Ecuador east of the Andes is, on a map issued by the Peruvian Government, marked as belonging to Peru as far north as the Rio Yapura.

1 9 from Coca, E. Ecuador, 260 m., March 1900 (Haensch).

Differs from Campylona solilucis Butler (Phaeochlaena) in not having the inner margin of forewings black, herein agreeing with the type species bicolor Moeschl.

#### 28. Cyllopoda angustistriga spec. nov.

Differs from osiris Cram., to which it is most nearly allied, in having the pale blotch on inner margin of forewing, which usually reaches to the median vein, reduced to a narrow streak, limited above by the submedian; in the hindwing, on the other hand, it is the dark border running from apex to anal angle which is narrower than in osiris.

Expanse of wings: 36 mm.

1 \$\forall \text{ from Chirimayo, S.E. Peru, 1000 m., July 1901, dry season (Ockenden), type; 1 \$\forall \text{ from the river Slucuri, S.E. Peru, June 1901, dry season, 2500 ft. (Ockenden).}

#### 29. Cyllopoda chibcha ab. cuneifera nov.

In this form of *chibcha* Schaus, the marginal border of the hindwings, which in typical specimens is simply notched at vein 2, is produced along that vein towards lower angle of cell as a sharp-pointed tooth.

1 & from Sapucay, near Villa Rica, Paraguay, July 1902 (Foster), type; 1 & from Ynngas, Bolivia, November 1901, end of dry season, 1200 m. (Simons).

#### 30. Darna rubriplaga spec. nov.

Forewing: deep brown-black, the margins darker-scaled; an elongated bright red blotch beyond the cell, its upper edge enrved but not quite touching the costa, the lower edge straight, ending in a blunt point towards hindmargin, rounded basewards; the space beneath it and below median vein paler brown; fringe concolorous.

Hindwing: with margins dark brown, the centre paler, containing an elongated blotch of black scales.

Underside of forewing with the red patch rounder, reaching below vein 3; the area below the median to vein 2 lustrous; of hindwing grey-brown, darker along the margins.

Head, thorax, and abdomen velvety blackish, the last with a lateral blue sheen including the anal segment.

Expanse of wings: 40 mm.

1 & from Rosario, St. Inez, E. Ecuador, 1250 m., April 1899 (Haensch).

#### 31. Darna volitans spec. nov.

Forewing: velvety brown-black in the apical and inner-marginal areas, the rest of the wing deep yellow; the edge of the yellow area runs from three-fifths of costa obliquely towards the end of vein 2, before which it is bluntly angled, running basewards nearly to the origin of vein 1, then sinuous and more or less parallel to costa to near the base of inner margin; its costal margin is narrowly black; fringe black.

Hindwing: smoky black; the costal half purplish grey and semidiaphanous, containing an oval dull pink patch, in the centre of which lies an elongate patch of brown scales.

Underside as upper: inner margin of forewing pale and blurred; the black less deep and with a bluish tinge.

Head and thorax deep black; abdomen and legs dull black.

Expanse of wings: 44 mm.

4 & from Chanchamayo, Peru, January to August 1901 (Hoffmanns).

#### 32. Ephialtias fornax and ab. latimargo nov.

Lyces formus Druce, Pr. Z. S. 1885, p. 525, t. 32, fig. 11.

Of five examples, apparently of this species, two are  $\delta \delta$  from Baiza, Ecuador, dated January 1900, three are  $\mathfrak{P}\mathfrak{P}$  from Rosario, St. Inez, E. Ecuador, dated April and November 1899. These two  $\delta \delta$  are as large as the  $\mathfrak{P}\mathfrak{P}$ , and differ as follows: the oblique yellow band in the forewing of the  $\mathfrak{P}\mathfrak{P}$  is straight with a slight protuberance outwardly above its lower end; in the  $\delta \delta$  this band is sinnous and without the protuberance. In the hindwing the black marginal border is twice as wide as in the  $\delta \delta$ , and the yellow area in consequence twice as narrow; its inner edge is irregularly jagged in the  $\delta \delta$ , and evenly undulated in the  $\mathfrak{P}\mathfrak{P}$ . The antennae of the  $\delta \delta$  are pectinated. In his description of fornax, which he referred to Lyces, the  $\delta \delta$  of which genus should have simple antennae, Druce says that the  $\mathfrak{P}\mathfrak{P}$  are larger than the  $\delta \delta$  (45 and 39 mm.), but that except in point of size they are similar. If this be correct, the two  $\delta \delta$  from Baiza must be at least an aberration, and may be a distinct species. At present they may be left as ab. latimargo.

#### 33. Euchontha commixta spec. nov.

Forewing: dark olive-brown; the veins paler; a dull partially scaled hyaline blotch lying beyond cell and before the middle of wing between the subcostal and median veins, traversed by the two swollen radials; a small white spot before apex, crossed by veins 6 and 7; fringe dark brown.

Hindwing: white, with a uniformly broad black marginal border; the base narrowly smoky grey.

Underside of forewing blacker; both white spots larger; the median one reaching to base of wing; costal area white at base; hindwing as above.

Palpi black externally, white inside, the second joint yellow; face white at top and in middle, black between and below; vertex black with a pale spot behind; thorax black with a white streak along middle; patagia black with an orange lateral spot at base; abdomen cinereous, the basal segments whitish on dorsum only; abdomen below and legs internally white; legs externally blackish.

Expanse of wings: 32 mm.

1 d from Upper Toro River, La Merced, Peru, August to September 1900, 3000 m. (Simons).

## 34. Euchontha memor spec. nov.

Forewing: brown-black; all the veins slightly paler; a broad oblique white fascia from subcostal vein before middle of wing to vein 1 before anal angle; a small white subapical spot crossed by vein 7; fringe brown-black.

Hindwing: dull olive grey-brown, the apex fuscous, the costal margin whitish; the veins pale.

Underside similar, but paler, especially in the hindwing.

Palpi externally black, internally whitish; face white at middle with a black bar above and below; vertex and thorax blackish; abdomen cinereous; an orange spot near base of forewing on patagia.

Expanse of wings: 30 mm.

1 & from Chanchamayo, January—August 1901 (Hoffmanns).

## GENUS Hemigymnodes Warr., Nov. Zool. i. p. 377 (1894).

This genus, which seems most nearly allied to *Tithraustes*, would be better placed in the *Cyllopodinae* than in the *Orthostixinae*. In the hindwing the costal and subcostal veins anastomose near base at a point, and are not united, as stated in the original description, by a bar. In the forewing veins 7, 8, 9 are stalked from close to end of cell, 10 and 11 are stalked also, and 10 anastomoses with 7, 8, 9. The antennae are subservate, with short fascicles of curled cilia.

#### Josia erectistria spec. nov.

Forewing: velvety brown-black, with an elongated broad yellow streak from base of inner margin, parallel to costa throughout, and ending its own width where widest before hindmargin; slightly constricted before end in the \$\gamma\$, much narrowed and ending in a blunt point directed towards apex in the \$\delta\$, so that the costal margin appears much broader; fringe brown.

Hindwing: yellow, with the costa narrowly and the hindmargin more broadly black, especially in the  $\mathcal{E}$ .

Underside similar, the edges of the yellow markings more concise; in the ? the costal vein of hindwing is marked with brown scales; in the 3 the subcostal vein bears a black blotch at its end, and vein 7 is blackish.

Head, thorax, and abdomen brown-black.

Expanse of wings: 3 46 mm., 9 52 mm.

Allied to J. striata Druce. In the  $\beta$  the forewing has no distinct analangle, the inner margin being convex, and forming one curve with the hindmargin; the hindwing has the costa strongly arched, and the apex bluntly pointed instead of well rounded as in the  $\beta$ .

## 36. Josia longistria spec. nov.

Forewing: brown-black, with an elongated central yellow stripe, starting at base from between submedian vein and subcostal, widening slightly to end of cell, where it is notehed and narrowed, and jending in a point on vein 4 well before hindmargin; fringe grey-brown.

Hindwing: yellow, with the costa and hindmargin narrowly black, broader towards apex and before anal angle.

Underside like upper.

Head and thorax brown-black: abdomen paler, cinereous.

Expanse of wings: 44 mm.

1 º from Baiza, E. Ecuador, January 1900 (Haensch).

#### 37. Josia vulturata spec. nov.

Forewing: brown-black, with a large orange blotch in shape something like the head of a vulture, bounded above from near base to middle by the costal vein, whence the outside edge runs somewhat jagged obliquely outwards to two-thirds of vein 2, where it is shortly curved downwards, forming a beak, and then curves inwards to base of median vein; the subcostal vein shortly brown at base.

Hindwing: blacker; the orange area confined to a small blotch close to base between inner margin and median vein, running out along the latter for one-third of wing.

Underside similar, but the space below the orange patch on forewing shot with deep purple.

Head, thorax, abdomen, legs, and antennae all black.

In the ? the orange patch of forewing is larger in every way; starting from beyond middle of costa, curving at vein 3, and running inwards farther from the median, and in the hindwing running to the end of cell, of which it tills up the lower half.

Expanse of wings: 48 mm.

1 & Upper River Toro, La Merced, Pern, August, September 1901, 3000 m. (Simons), type; 1 &, 1 &, Chanchamayo, January—August 1901 (Hoffmanns). In the orange marking of forewing it is a remarkable mimic of Darna volitans from the same locality.

#### 38. Phaeochlaena bialbifera spec. nov.

Forewing: black-brown; the veins yellow; a broad white band from before middle of costa to vein 1 a little before anal angle; a small yellow spot close before hindmargin above vein 5; fringe black. In the 3 the band is only half as wide, much constricted on the subcostal vein, and reaches submedian fold only, and the yellow dot is hardly shown.

Hindwing: with the centre white, rounded at extremity towards middle of hindmargin and at base embracing two-thirds of costa; the margins black, the inner broadest, the hindmargin at middle narrowest.

Underside like upper; base of forcwing streaked with white, the hindwing with the whole inner margin white.

Face and palpi black above, white beneath; shoulders and patagia black, varied with yellowish at their base; abdomen dark cinereous above, white below.

Expanse of wings: 30 mm.

1 3, 1 ?, from Rosario, St. Inez, E. Ecuador, 1250 m., November 1899 (Haensch).

## 39. Polypoetes picaria spec. nov.

Forewing: black, all the veins yellowish; longitudinal semihyaline white streaks in basal half of cell and below median vein, this latter reaching beyond half the length of wing and sharply bilobed at extremity; a subquadrate blotch beyond cell, its outside edge curved, and a small spot before apex, both white; the space beyond each of the longitudinal streaks and all the margins deeper black.

Hindwing: smoky blackish, the hindmargin deep black; an oblong white blotch beyond cell preceding the dark marginal border; friuge, as on forewing, black.

Underside the same, but the white blotches duller; in the hindwing the smoky black of the upperside is smoky white.

Head, thorax, and abdomen black, abdomen whitish beneath; basal joint of palpi and front edge of patagia bright orange.

Expanse of wings: 26 mm.

2 33, 1 2, from Marcapata, E. Peru, 10,800 ft. (Ockenden).

#### 40. Scea semifulva spec. nov.

Forewing: dull orange in basal half, dusted with very fine narrow dark scales; costa, inner margin, veins, and outer half of wing purplish grey.

Hindwing: uniform purplish-grey; fringes of both wings concolorous.

Underside similar, but the veins not dark.

Head, thorax, abdomen, and legs, all purplish grey.

Expanse of wings: 39 mm.

2 99 from Guaranda, E. Ecuador, May 1899 (Haensch).

Nearest to cleonica Druce, from which it is distinguished by the purplish grey coloration, which reaches to middle of costa and to two-thirds of inner margin.

#### 41. Stenoplastis spumata spec. nov.

Like S. aurantica Druce, but with an aggregation of white scales beyond cell and along submedian fold, hardly forming a spot or blotch.

The hindwargin of hindwing from apex to middle straight, and appearing bluntly angled at vein 4.

1 & from Chulnmani, Bolivia, 2000 m., January 1901, wet season (Simons). This seems to be a form intermediate between aurantica Druce and cingulina Druce.

#### SUBFAMILY GEOMETRINAE.

## 42. Aplodes punctata spec. nov.

Forewing: pale yellowish green, with the fringe green; the lines marked by white dots on the veins; first at one-fourth, the second at five-sixths; no cell-spot.

Hindwing: the same, but with a slightly darker green cell-spot.

Underside pale whitish green, the forewing flushed with pale yellowish rufous. Face and palpi reddish brown; vertex and shaft of autennae white; thorax and abdomen pale green.

Expanse of wings: 20 mm.

2 33 from Upper Park, Jamaica.

Hindwing broad, the hindmargin rounded, but with a slight bend, not an angle, in the middle; frenulum very small and fine.

The second of these two examples is grey or green, with the lines faintly paler between the dots, and edged conversely with deeper green. These insects were labelled *N. paularia* Moeschl., but Moeschler, in his description of his insect, says the wings are green without any markings, and the head green.

#### 43. Comibaena flavidisca spec. nov.

Forewing: deep green above the median and vein 3, below these smoky brick-red, dusted with blackish, and with traces of black markings; these are a small blotch at base, a thick line at one-third, concave inwards, a similar line at two-thirds, concave outwards and emitting outwards two strong teeth, and a blotch at anal angle; cell-spot fine, blackish; fringe with basal half deep green, apical half paler, from anal angle to vein 3 blackish; a black dash at apex.

Hindwing: pale golden yellow; the base brick-red with an outwardly concave dark edge; just before middle a velvety black dentate-lumilate line, joined to basal patch by dark scales along the veins and below the median edged with brick-red scales; a strongly dentate postmedian line followed by a pale snuff-coloured belt, and below the median also preceded by a smoky brick-red cloud; marginal border blackish mixed with vinous red scales; fringe blackish with pale apices.

Underside of forewing like upper, but the green paler, the costal edge fuscous; inner margin grey and black, without any red scales: hindwing smoky white with greenish black marginal border, the markings of upperside showing through;

fringe as above.

Palpi ochreous; face and vertex snow-white; collar yellow (perhaps faded); patagia green; thorax and abdomen yellow ochreous; forelegs whitish, fuscous in front.

Expanse of wings: 27 mm.

3 && from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November and December 1901, wet season (Ockenden).

Manifestly allied to *lepidaria* Moeschl, from Surinam and *subscripta* Warr. from Venezuela, with each of which it agrees in certain points; the white black-bordered underside of hindwing will serve at once to distinguish it.

## 44. Drucia latimargo spec. nov.

Forewing: very pale green, semi-transparent; ochrous along costa, with the costal edge brownish; a small dark cell-spot; hindmargin red-brown (pale red with dark brown striae becoming confluent): the markings as in asmura Druce, but exaggerated, much broader throughout, the green sinus in middle narrower and not approximating to hindmargin, the blotch at anal angle reaching nearly to middle of inner margin and touching lower angle of cell; fringe yellowish, mottled with red.

Hindwing: with hindmargin similarly broadened, the red-brown edged with yellow, and the narrow sinus wholly yellow.

Underside whitish green, with blurred red blotches.

Face and palpi dull red; vertex, thorax, and patagia green; abdomen redbrown, with shining dorsal crests.

Expanse of wings: 30 mm.

1 3 from Santo Domingo, Carabaya, S.E. Peru, December 1901, wet season (Ockenden).

## 45. Gelasma stigmatica spec. nov.

Foreign: dull grey-green; two waved darker lines, the first from one-fourth of costa to one-third of inner margin, the outer at three-fourths projecting on

veins 3 and 4, then incurved; space between the lines darker green, especially towards the lines, which are outwardly edged with paler; costa strigulated with black-brown; a black-brown lumulate marginal line; fringe green; cell-spot very large, black-brown.

Hindwing: similar; the cell-spot still larger, elongate.

Underside pale green with the cell-spot showing through.

Head, thorax, and abdomen green; vertex white.

Expanse of wings: 30 mm.

Several && from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., May 1902, dry season (Ockenden).

#### Hyalorrhoë gen. nov.

Allied to *Prohydata* Schaus, the costal vein of hindwing not anastomosing with subcostal, except at a point.

Forewing: with hindmargin oblique, faintly curved.

Hindwing: with hindmargin strongly erenulate, with a deeper sinus between veins 4 and 6.

Antennae of  $\mathcal{S}$  bipectinate: of  $\mathcal{V}$  thickened, with short, close, clavate teeth; palpi slender, porrect, the terminal segment bent downwards, in  $\mathcal{V}$  very long, longer than second segment.

Tongue and frenulum invisible.

Nenration: forewing, cell more than half as long as wing; discocellular concave; first median nervule at five-eighths, second at seven-eighths, where the median is inbent; vein 5 from above middle of discocellular; 6 stalked with 7, 10, 8, 9; 11 anastomosing strongly with 12; hindwing, costal touching subcostal at a point; 6, 7 long-stalked.

Type: Hyalorrhoë stigmatica spec. nov.

Hydata malina Butler also belongs here.

## 46. Hyalorrhoë stigmatica spec. nov.

Forewing: very pale whitish green, with the costa, lines, and cell-spot darker; basal line thick, waved; antemedian, postmedian, and submarginal all wavy and dentate; cell-spot very much darker and large; fringe pale green.

Hindwing: with antemedian line and a small dark cell-spot; the rest as in forewing.

Underside whitish, with the darker markings, especially the cell-spot of forewing, showing through.

Thorax, face, and abdomen pale green; vertex and shaft of antennae white.

Expanse of wings: 24 mm.

1 9 from Costa Rica, 1500 m. (Marc de Mathan).

## 47. Lissochlora flavilimes spec. nov.

Forewing: apple-green: the costa finely pale: fringe lemon-yellow, with a marginal band of lemon-yellow of the same width as the fringe, the limit of the green area marked with a few reddish scales towards anal angle; a pink spot at apex.

Hindwing: the same, but without any pink apical spot; the green area distinctly edged with purplish.

Underside very pale whitish green, the forewing with a ruddy tinge.

Face and palpi whitish green, edged with reddish; vertex and base of antennae snow-white; a fine red line between antennae; thorax and abdomen greenish, forelegs reddish in front.

Expanse of wings: 19 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

A much-worn \$\partial\$, apparently of this species, from the same locality, in M. Dognin's collection, expands 30 mm., and has a distinct dark cell-spot in each wing.

#### Lophochorista gen. nov.

Forewing: costa straight, becoming convex towards apex, which is bluut and rectangular; hindmargin bent at vein 4.

Hindwing: with hindmargin crenulate, and more deeply sinuate between veins 4 and 6, which end in more prominent teeth.

Antennae of 3 bipectinate for two-thirds, the outer series of pectinations twice the length of the inner; palpi porrect, but quite short, not reaching in front of face: tongue weak; frenulum present; hindtibia flattened, and fringed, with two spurs.

Neuration: forewing, cell nearly half as long as wing; discocellular sinuous, vertical above, then incurved and oblique below; first median at three-fourths, second and third together from lower end of cell; 5 from above the middle of discocellular; 6 stalked with 10, 7, 8, 9; 11 free: bindwing, costal and subcostal anastomosing along second fourth of cell; 6, 7 long stalked; first median at four-fifths.

Thorax and abdomen rough-scaled; metathorax thickly tufted; first four dorsal segments with rough curled tufts. Scaling fine and sparse; wings semi-transparent.

Type: Lophochorista callione Druce (Rachcospila).

Allied to Hydata; distinguished by the crests of dorsum.

#### 48. Melochlora intermedia spec. nov.

Agrees with *M. trimaculata* Warr, in having the lines deep green, not brown, as in *M. neis* Druce; the bluish lustre before the first line and after the second and along the inner margin is also present; fringe with a black spot at apex; but the hindwing is wholly without the three black spots of trimaculata; on the underside, the dark clouding is like that of *M. neis* Druce rather than that of trimaculata; the submarginal and innermarginal black shades coalescing into a rectangular blotch, and the hindwing being crossed by two broad distinct dark bands; the green of the hindwing is much paler, while the forewing is brighter.

Expanse of wings: 39 mm.

1 d. Peru. The angulation in the middle of the hindmargin of forewing is very slight; herein also it agrees better with neis than trimaculata.

#### 49. Miantonota decorata spec. nov.

Forewing: dull green: costa paler, the costal edge narrowly white, shortly underlined with reddish at base and before apex; lines whitish, very fine and slender: first from one-fifth of costa to one-fourth of inner margin, angled on

median vein; second from one-third of costa to three-fifths of inner margin, nearly parallel to hindmargin; both lines faint below costa, slightly waved towards inner margin, sometimes with faint teeth at the veins; a broad deep pink marginal line, interrupted by pale spots at the ends of the veins; fringe yellowish, with distinct fan-shaped chequerings of pink beyond veins; cell-spot small and dark.

Hindwing: with both lines curved, the onter distinctly bent in middle; cell-spot minute; fringe and marginal line as in forewing.

Underside paler green; costa of forewing yellow; the pink and yellow tints

of the margin duller.

Face and palpi tinged with reddish; face with a white lateral spot on each side at middle; vertex and fillet white, the vertex behind with a fine red line; antennae white with a reddish tinge: shoulders, patagia, and thorax green, like wings; abdomen like face, ochreous strongly rufous-tinged, the segments deeper rufous in front and at sides, the basal segments therefore with obscure paler triangular blotches; forelegs reddish in front.

Expanse of wings: 32 mm.
1 & from Huatuxco, Vera Cruz.

#### 50. Neocrasis heterograpta spec. nov.

Forewing: apple-green, passing into yellow-green before a dull chocolate-brown marginal shade; inner and outer lines very fine, white; the inner curved from one-fifth of costa to one-third of inner margin, the outer from two-thirds of costa, bent on vein 6, then obliquely sinuous inwards to three-fifths of inner margin, approximating to inner line; the included space below the median vein filled up with white scales; marginal line chocolate-brown, preceded below middle by an ashy brown shade; fringe with basal half brown, outer half white, spotted with brown beyond veins 7, 4, and 3.

Hindwing: similar; the space between the two white lines narrower at costa and filled with white scales in costal third only; veins 5, 6, and 7 narrowly white; marginal line preceded by the ashy brown shade throughout the wing.

Underside whitish, only the costal half of forewing being green; fringe as

above, preceded by a slight cloud only in upper half of each wing, below the

middle by indistinct lunules.

Face, palpi, vertex, and antennae dull reddish, face and palpi below othreous; shoulders and patagia bright green; thorax and abdomen yellowish green passing into othreous; the second and fifth segments of abdomen marked with ashy brown.

Expanse of wings: 32 mm.

233 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901,

wet season (Ockenden).

The character of the markings and scaling is decidedly different from that of N. obscurata Warr., the type of the genus, and vein 6 of hindwings is toothed; but it may be referred here for the present.

## Neonemoria gen. nov

Forewing: elongate; costa straight, becoming convex only before apex, which is produced but depressed; hindmargin oblique, hardly curved.

Hindwing: with well rounded hindmargin.

Antennae ( $\delta$ ) subscript, ciliated, the segments with angular edges: palpi porrect, short, not reaching beyond face, third segment small: tongue and freunlum present: hindtibia of  $\delta$  dilated, with pencil of hairs internally and a process externally, without spurs.

Neuration: forewing, cell half as long as wing; discocellular nearly vertical, somewhat more oblique below; first median nervule at two-thirds, second at eleven-twelfths, where the median vein is inflected; lower radial from a little above middle of discocellular; upper from upper angle of cell, the subcostal vein deflected from the origin of veins 7, 8, 9; 10 close before them, 11 at one-half; 10 anastomosing with 11 and again with 8, 9, forming a long double areole; hindwing, costal merely touching subcostal near base; 6 and 7 stalked; the rest as in forewings.

Type: Neonemoria plana spec. nov.

I cannot fairly refer this species to any existing genus.

#### 51. Neonemoria plana spec. nov.

Forewing: very pale green (perhaps laded); fringe concolorous.

Hindwing: the same: no markings on either wing.

Underside yellower: the costa of forewing broadly rosy to apex.

Face and palpi rosy above, pale green below; vertex white; collar red; thorax and abdomen concolorous with wings; antennae reddish beneath; forclegs reddish in front.

Expanse of wings: 22 mm.

1 & from Chimate, Bolivia, September 1900 (Simons).

#### 52. Oospila atroviridis spec. nov

Forewing: semi-transparent grass-green: the costa narrowly black-brown: cell-spot obliquely oval, black-brown, on the lower half of discoccllular; a broad black-brown marginal border, round-edged between the veins, starting from vein 7, narrowed between veins 3 and 4, and enclosing there on hindmargin a green lunule; marginal line black-brown; fringe rather paler, but dark beyond the veins; the dark margin is very finely overlaid with pale scales.

Hindwing: with the marginal border not so broad, and from above vein 4 to below vein 3 obsolete: a small black-brown cell-spot at lower end of disco-cellular, and a whitish raised one at upper end; fringe as in forewing.

Underside opalescent whitish green, the forewing tinged with dull rosy; the black margin with diffuse edges; cell-spots black.

Face, palpi, antennae, and legs dull vinous red; vertex, thorax, and patagia green; abdomen black and vinous, with three metallic-tinged raised crests; abdomen beneath yellowish, tinged with red.

Expanse of wings: 35 mm,

1 of from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).

## Paraplodes gen. nov.

Forewing: narrower and more elongate than in Aplodes: costa curved throughout; hindmargin obliquely curved.

Hindwing: narrow; hindmargin curved; inner margin long; anal angle well marked; apical angle rounded.

Antennae (?) broken, but thickened at base; palpi long, as in *Synchlora*, the third segment subspatnlate, as long as second; no tongue or frenulum visible; legs long and slender; hindtibae with terminal spurs only.

Neuration: forewing, cell half as long as wing; discoccilular vertical above, oblique below; first median nervule at two-thirds, second at eight-ninths, the median nervule thence inflected; lower radial above middle of discoccilular; upper from upper end of cell; 7, 10, 9, 8, long-stalked from end of cell; 11 anastomosing with 12; hindwing, costal anastomosing strongly with subcostal throughout the middle half of cell; 6, 7 on very long stalk; first median at three-fourths, second at eleven-twelfths.

Type: Paraplodes aurata spec. nov.

The genus agrees with Aplodes and Synchlora in the anastomosis of the costal and subcostal of hindwings, but differs in neuration and the spurs of the hindtibiae.

The type species is without markings of any kind.

#### 53. Paraplodes aurata spec. nov.

Forewing: yellowish green, without any markings, fringe concolorous.

Hindwing: the same.

Underside similar.

Face, palpi, vertex, thorax, and abdomen concolorous; fillet and base of antennae snow-white.

Expanse of wings: 16 mm.

1 9 from Pambilar, Ecuador (Flemming & Miketta).

## 54. Racheospila dependens spec. nov.

Forewing: pale green; the markings dull brown-red; costal streak broad, with lower edge diffuse, costal edge from near base to before apex snow-white; cell-spot large, oval, joined to the costal streak; a slight projection before it and a tooth at three-fourths indicate the commencement of two faint dentate cross-lines, slightly paler than the ground colour and edged narrowly with deeper; marginal border formed of contiguous innules with well-defined edge, that at anal angle swollen into a blotch; fringe rufons, darker beyond veins.

Hindwing: with large cell-spot and marginal border swollen subapically; the two transverse lines distinct, the inner margin marked diffusedly with red between them.

Underside pale green, with all red markings less defined; base of fringe greenish.

Palpi externally and upper half of face bright red, lower half of face green (or green mixed with red); vertex and antennae white; collar red; shoulders and patagia green; thorax and abdomen red, the latter with three white dorsal spots.

Expanse of wings: 3, 22 mm.; 9, 26 mm.

1 &, 2 ♀♀ from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November, December 1901, wet season (Ockenden).

Distinguished from *leucoceraria* Snell, by the absence of any yellow edging, by the large cell-spots, and in particular by the absence of the large white metathoracie blotch.

#### 55. Racheospila molliculata spec. nov.

Forewing: semi-transparent, pale dull green, with all markings dark or bright red-viz., the costa, cell-spot, two cross-lines, and the marginal line; the lines marked by vein-spots, being the teeth of the denticulate lines; cell-spot large; fringe whitish.

Hindwing: the same.

Underside glossy pale green; cell-spot, onter and marginal lines, and base of costa ferroginous.

Face and palpi reddish above, paler beneath; vertex white; collar reddish; thorax green; abdomen with the dorsum reddish, a large white spot on the second and fourth segments; antennae reddish-tinged.

Expanse of wings: 26 mm.

7 33 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., January 1902, wet season (Ockenden).

Nearest to R. purpureoriridis Warr., but the wings are still more transparent, and the markings rust-coloured instead of violet.

#### 56. Racheospila promontoria spec. nov.

Forewing: bright green; the marginal blotches flesh-colour, edged with redbrown; a large semicircular apical blotch nearly reaching vein 4, containing some brown dashes and speckles: a large irregular blotch at anal angle, narrow from vein 3 to 2, reaching along inner margin to middle and truncated on median vein between veins 2 and 3, contiguous to a large oval grey-brown discal spot; on the inner margin the centre of this blotch is separated from the outside portions by brown curved shades, the inner being the termination of the second line; inner line close to base and onter line at two-thirds, darker green, dentate-lumulate, indistinct, but each marked below costa by some red-brown scales; costa pale yellowish, the edge white; marginal line red-brown, subcrenulate; fringe flesh-colour.

Hindwing: with the apical blotch sinnous, reaching from middle of costa nearly to vein 4; the anal blotch flatter above, being limited by vein 2, not touching the discal spot, which is smaller, and continued as a narrow dark-brown shade along inner margin to base, where there is a brown spot; fringe and marginal line as in forewing.

Underside whitish green, with only the apical blotches marked, that of the forewing distinct, broadly red-brown, whitish towards apex only, that of the hind-wing indistinct; cell-spot of forewing brown; costa yellowish.

Face, palpi, and front of forelegs dark brown; vertex and shaft of antennae white; collar and shoulders yellowish; patagia green; thorax and abdomen flesh-colour; the latter with white patches on second and fourth segments, and smaller pale marks on third and fifth; abdomen beneath, legs, and pectus whitish.

Expanse of wings: 35 mm.

4 & & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).

The palpi are somewhat abnormal, being roughly and thickly scaled, and short, the basal segment white beneath, the third hidden in the hairy scales of the second, which are red-brown.

#### 57. Tachyphyle subaurata spec. nov.

Forewing: dull olive-green, the costal edge beyond middle bluish white; a very obscure darker green curved line from one-fourth of costa to one-third of inner margin; a straight oblique line from three-fourths of inner margin towards apex, outwardly edged with bluish; fringe whitish green, with a dark dash at apex; cell-spot small, black.

Hindwing: with the oblique line continued across wing a little beyond middle; cell-spot black; fringe whitish green.

Underside paler green, the cell and subcostal area beyond deep yellow, the veins beyond cell also yellow: hindwing with a dark blotch from lower end of cell to vein 1.

Face, vertex, and palpi white, sides of face and tips of palpi with reddish scales; thorax and patagia green; abdomen yellowish.

Expanse of wings: 32 mm.

2 & & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, January 1902, wet season (Ockenden).

Distinguished from its allies by the markings of the underside.

#### SUBFAMILY STERRHINAE.

#### 58. Anisodes aurantiata spec. nov.

Forewing: deep yellow, with orange-red speckles and striae, becoming confluent in places; basal and outer line marked by black dots on veins; the first near base, marked by dots on the folds as well as the veins; the outer from four-fifths of costa to three-fourths of inner margin, curved parallel to hind-margin, the dots on the folds displaced somewhat basewards; cell-spot minute, snow-white, in a black ring; median shade thick and diffuse, formed of densely aggregated orange-red scales, and traversed by a fine dark grey zigzag line, sinuons, from three-fifths of costa to middle of inner margin; submarginal line indicated by a deeper shade of orange-red preceding it, darker, being mixed with blackish scales, beyond cell and between veins 2 and 3; a row of distinct black marginal spots; fringe deep yellow, spotted with orange-red.

Hindwing: like forewing; the cell-spot darker, with grey centre.

Underside yellow, with the speckling and lines dull red.

Head, thorax, and abdomen deep yellow varied with orange-red; abdomen below and legs yellowish ochreous; hindtibia with a yellow tuft of hairs from base, and with terminal spurs only.

Expanse of wings: 31 mm.

2 & d d, 2 ♀♀ from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

A brighter and gayer insect than usual in the genus. The \$\pa\$ shows less of the yellow ground colour, being more thickly striated with orange-red, and in one case suffused with brown.

## 59. Anisodes bipunctata\_spec. nov.

Closely allied to A. nebuligera Butler from the Amazons, but without any distinct dark cloud on the hindmargin of the wings, the forewing, however, being well marked, with the two black spots which in nebuligera precede the marginal cloud; the hindwing is likewise devoid of the large grey shade from

the base to beyond the middle of wing; cell-spots of both wings transversely linear; ochreous, dark-edged inwardly on forewing; silvery white, dark-edged ontwardly on hindwing.

Face, palpi, and vertex dull brown above, paler below; thorax and basal

segments of abdomen fuscous reddish; rest of abdomen paler grey.

Hindtibiae of ♂ with a single median and two terminal spurs. Expanse of wings: 30 mm.; nebaligera Butler is rather larger.

1 &, 1 ♀ from Santo Domingo, Carabaya, S.E. Peru, 6000 It., November, December 1991, wet season (Ockenden).

#### 60. Anisodes flavidiscata spec. nov.

Forewing: dark brownish fawn-colour, striated and tinged with darker, with almost identical markings with albipupillata Warr.; but the large white cell-spot is black-edged.

Hindwing: cell-spot white, black-edged, with a disc of pale yellow raised scales surrounded externally by a crescent of black scales.

Underside rosy, paler in the hindwing, with the lines and cell-spots showing through.

Face and palpi dull reddish; fillet narrowly whitish; vertex, thorax, and abdomen like wings; abdomen laterally and beneath pale.

Expanse of wings: 35 mm.

1 & from Huatuxco, Vera Cruz, type.

1 % from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

The ? is somewhat redder above and greyer beneath.

## 61. Anisodes hieroglyphica spec. nov.

Forewing: yellowish straw-colour, finely dusted with dark scales; the markings fine and concise, purplish black; the costa to near middle, a straight oblique line from three-fourths of costa to middle of inner margin, a slender onteurved line from costa just beyond it, a curved line on discocellular, vein 4 throughout, and the inner halves of veins 5 and 6, all purplish black; the discocellular beyond the black line and the centre of the streak at base of vein 4 are filled with lilac-grey scales; beyond the curved onter line are two short spurs, one below the other above vein 4; below the median this outer line is marked only by dark vein-points, like the inner line, which starts from a small projection half-way beneath the costal streak; marginal points very minute; fringe concolorous, except where cut by the purple line above vein 4.

Hindwing: in the main similar, but the oblique line of forewing is sharply angled ontward on vein 5 and then passes, as it were, beneath the lines on vein 4 to middle of inner margin, an extra spur being thrown off from bottom of discocellular to one-fourth of inner margin; a short purplish streak at base; the streak on vein 4 forks before margin, and then runs out crescent-shaped on each side of the deep excision beyond cell into the fringe.

Underside speckled with purple; the cell-spots, the dots of the outer and marginal lines and the purple spots in fringe shown in both wings; the forewing also has a streak above vein 4 and the upper half of the oblique line purple, and the base of cell spotted with rosy purple.

Head, thorax, and abdomen straw-colour; palpi above and externally reddish; top of head dark; a ring behind vertex, centre of thorax, base of patagia, a lateral line on thorax, and a line across base of metathorax purple; abdomen beneath and legs straw-colour; antennae straw-colour, the shaft dotted with red.

Expanse of wings: 30 mm.

1 & from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., May 1902, dry season (Ockenden).

A remarkable-looking insect. The hindtibia has three spurs, as in Pisoraca.

#### 62. Anisodes imparistigma spec. nov.

Forewing: pale stone-colour, dusted with olive-tinged grey and rufous scales; the costa darker, with olive-grey striations: the lines olive-tinged; first line at one-fourth, vertical, but curved outwards above and below the median vein, and marked by dark vein-dots; outer line lumnlate-dentate at three-fourths, oblique to vein 6, vertical to 4, then incurved, marked by dots on the veins, and followed by an olive shade, which is more prominent beyond cell and on submedian fold, preceding a pale submarginal line: a row of dark spots just before the margin; fringe concolorous; cell-spot large, a brick-red annulus, with pale centre; it is followed by a sinuous diffuse olive median shade.

Hindwing: as forewing, but the cell-spot is much larger, round, and coal-black. Underside greenish ochreous, with greenish grey striae, and both cell-spots distinct.

Palpi externally and face brown; vertex white; thorax and abdomen ochrons, speckled with olive.

Expanse of wings: 29 mm.

1 & from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

The example described was probably much greener when fresh; the distinct cell-spots will serve to distinguish it.

#### 63. Anisodes magnidiscata spec. nov.

Forewing: dull reddish fawn-colour, speckled with pale grey, especially along the veins; costal edge pale ochreous; the lines marked by shades slightly deeper than the ground colour; the median from two-thirds of costa, bent inwards beneath the cell-spot, which is of moderate size, greyish white, with darker edging; the outer line nearer hindmargin than usual, marked by dark veindashes tipped with grey externally; no distinct marginal spots; fringe concolorous.

Hindwing: like forewing, but without basal line, and the cell-spot a very large grey circle with faintly darker edge, and containing an inner dark grey ring.

Underside dull reddish, much paler in hindwing; forewing with costa fulvous-tinged; a white cell-spot, and reddish median shade and outer line; also slight reddish marginal lumules: hindwing with the same markings but fainter; the large discal spot only showing through.

Face and palpi externally dull dark reddish; vertex and antennae white; thorax and abdomen like wings; the anal segments and underside of abdomen

ochreons; hind femur and basal half of tibia fringed with dull ochreous hairs; the tibia with terminal spurs only.

Expanse of wings: 40 mm.

1 & from Charaplaya, Bolivia, 1300 m., June 1901 (Simons), type; 1 & from Chulumani, Bolivia, 2000 m., December, beginning of wet season (Simons).

#### 64. Anisodes mediolineata spec. nov.

Forewing: pale wood-colour, densely speckled with black, and faintly tinged with vinous, the costal edge and fringe of inner and outer margins being bright vinous: basal and outer lines marked by dark spots on veins, faintly connected in places by a thickening of the dark atoms, which do not form a distinct line; first curved from one-fourth of costa to one-third of inner margin; the outer at five-sixths, curving parallel to hindmargin; median shade represented by a thick vinous brown line from two-thirds of costa to two-thirds of inner margin, faintly sinuate; cell-spot hardly visible, formed of a few dark scales; a row of minute dark marginal dots.

Hindwing: like forewing; the median line a little curved: cell-spot like that of forewing, sometimes with a few whitish scales intermixed.

Underside paler, the speckles and striations deep rosy; base of costa of forewing broadly deep rosy; onter line in both wings marked by dots; a fine marginal line; median shade very thick at costa of forewing, gradually thinning to inner margin of hindwing.

Head, thorax, and abdomen like wings; palpi externally, upper half of face, antennal shaft, collar, and basal half of dorsum deep rosy; anal segments of abdomen paler.

Expanse of wings: 44 mm.

7 & d from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November and December 1901, wet season (Ockenden).

Closely allied to A. aspera Warr, and rhodostigma Warr.

## 65. Anisodes ochricomata spec. nov.

Forewing: the sh-coloured ochreous, finely speckled with reddish atoms, which along the costa become purplish; spots of the lines dull reddish, slightly connected by a grey shade; basal line with spots on the folds as well as the veins; a zigzag obscure grey median shade beyond the cell-spot, which is small and white within a dark ring; submarginal line scarcely expressed, with obscure grey lunules preceding it; marginal spots reddish between the veins, with minute dots at their ends: fringe concolorous.

Hindwing: similar, without first line.

Underside very pale pinkish ochreons, with little speckling; the outer and marginal line of points reddish.

Head, thorax, and abdomen like wings; palpi externally rosy; face dull brownish. Hind femur and tibia with a fringe of ochreous hairs; the tibia with terminal spurs only.

Expanse of wings: 30 mm.

1 & from Onaca, Santa Marta, June—August (Engelke).

An inconspicuous-looking insect, but distinguished by the ochreous fringe of the hindleg.

#### 66. Anisodes pintada ab. punctulosa nov.

This form differs from the type of *pintuda* Dogn, in having all the vein-dots exaggerated, much larger and black-brown; the basal line showing six spots, one on each fold, and one subcostal nearer the base, in addition to the three on the veins; moreover, the lumular shade preceding the submarginal line has the apex of the lumules strongly black-brown, except between veins 3 and 4, and 6 and 7.

The underside remains typical.

 $1\ \mbox{\it d}$  from Chulumani, Bolivia,  $2000\ \mbox{m.},$  December, beginning of the wet season (Simons).

I have also seen && of this form from Popayan, Colombia.

#### 67. Anisodes rhodostigma spec. nov.

Exceedingly like A. aspera Warr., from Popayan, Colombia, but with entirely different cell-spots. In aspera these are pure white, edged with red, small in the forewings, large and distinct in the hindwings. In rhodostigma the cell-mark of forewings is a rosy point, and in the hindwings a red oval with the centre obscurely paler. As in aspera, the wings above have no marginal line, but beneath a continuous row of marginal lunules.

Expanse of wings: 48 mm.

3 & from Chulumani, Bolivia, 2000 m., January 1901, wet season (Simons).

#### 68. Anisodes subaenescens spec. nov.

Forewing: deep ferrnginous brown; the costa and lines deeper; first at one-fourth, curved, marked obscurely with darker spots on veins on its inner edge; median shade outcurved above middle round the cell-spot which is minute, but snow-white; outer line at three-fourths, marked on its outer edge by blackish spots on veins; submarginal line very obscure, slightly paler and preceded by a darker shade; marginal spots obscurely dark ferrnginous; fringe deep ferrnginous in basal half, the apical half paler; veins throughout olive-grey, speckled with dark.

Hindwing: similar, but without basal shade; the minute white cell-spot with a dark cloud above it.

Underside of forewing dull red, thickly striated with fuscous; the lines dark fuscous; cell-spot whitish, dark-edged; hindwing brassy yellowish, redder towards hindmargin, and striated with fuscous along costa and hindmargin; the lines as in forewing.

Face, palpi above, and collar deep brown-red; antennae black; vertex, thorax, and basal segment of abdomen bright reddish fulvons; abdomen dark fuscons, with reddish scales along middle of dorsum; abdomen beneath like base of hindwings; hind femur and tibia tinged with reddish grey hairs.

Expanse of wings: 35 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., May 1902, dry season (Ockenden).

This species comes near A. ferruginata Warr., from Paramba, Ecuador, but is smaller and darker.

#### 69. Anisodes torsivena spec. nov.

Forewing: mouse-colour; the lines marked by black spots; the first close to base, with spots on the folds as well as the veins, connected by a very fine line; outer line near hindmargin, indented beyond cell and on submedian fold, the spots similarly connected; black marginal spots between veins, and dots at their ends; fringe paler, slightly reddish; an indistinct central shade; cell-spot white; costa slightly striated with dark.

Hindwing: like forewing; the basal line present; cell-spot white with a black ring.

Underside of forewing vinous, the inner margin white and glossy; cell-spot and outer line marked: hindwing paler, with similar markings.

Head, thorax, and abdomen like wings; palpi externally bright rosy; anal segments and underside of abdomen ochreons

Expanse of wings: 22 mm.

1 & from Charaplaya, Bolivia, 1300 m., June 1901 (Simons).

The neuration of this insect is abnormal; cell about half the length of wing and wide; the median and subcostal divergent at base; discoccilular vertical; veins 2, 3, from near together at two-thirds; veins 5, 6, and a fold above cell bent downwards beyond it, somewhat as in the Old-World genus *Mesotrophe*; the hind-margin slightly excised between 4 and 6; veins 7, 8, 9, 10, 11 stalked from middle of cell; hindwing normal.

#### 70. Calyptocome conversa spec. nov.

Forewing: pale olive ochreous; the lines rosy, diffuse; a patch of rosy scales at base, a curved basal and median rosy shade, these two close together, and with the basal patch giving a reddish tinge to the whole basal half of wing; a narrow outer and broader submarginal shade, both sinnous, the latter nearly touching hindmargin below the middle; marginal line rosy; fringe brownish olive and rosy.

Hindwing: with a basal spot of red scales and three fasciae, antemedian, postmedian, and submarginal; marginal line and fringe as in forewing.

Underside of forewing suffused with rosy, except inner margin, which, like the whole of the hindwing, is whitish.

Face, palpi, forelegs, and antennae red; thorax and abdomen olive ochreous, dusted with dull red seales; antennae above annulated, reddish and pale ochreous.

Expanse of wings: 15 mm.

1 & from Bartica, British Guiana, May 1901.

This species is the converse of *phorcaria* Guen., *roscoliva* Warr., and others, the ground colour here being olive with the bands rosy, instead of the ground being purplish with the bands pale.

## 71. Calyptocome fragmentata spec. nov.

Forewing: pale stone-colour, dusted with fine black scales; the costa deep rosy: wings crossed by three interrupted broad olive-ochreous bands, edged with black scales; one near base, obscure; the postmedian and submarginal both interrupted between veins 4 and 6, and again on submedian fold, and so consisting each of three quadrate laterally dark-edged blotches—at costa, below median, and

above inner margin; cell-spot a triangular space of same colour touching costa and placed in an obscure median shade; marginal line deep purple; fringe stouccolour, tinged with rosy.

Hindwing: with median, postmedian, and submarginal similarly coloured bands, but narrower; fringe and marginal line as in forewing.

Underside pale greenish white, costal half of forewing suffused with rosy.

Face, vertex, palpi, antennae, and front of forelegs deep red; thorax and abdomen like wings.

Expanse of wings: 18 mm.

2 9 9 from Bartica, British Guiana, May 1901.

#### 72. Calyptocome inornata spec. nov.

Forewing: pale greenish ochreous, dusted in parts with dark scales; a dark cell-spot, a very indistinct, interrupted, brown subterminal line, and a row of black marginal lunnles; fringe concolorous.

Hindwing: the same.

Underside flushed throughout, especially in forewing, with reddish; the markings reddish, cell-spots, outer lines, and marginal lunules.

Face and palpi black-brown; vertex white; thorax and abdomen like wings.

Expanse of wings: 24 mm.

1 9 from Suapure, Caura R., Venezuela, October 1900 (Klages).

The insect differs much in outward appearance from the other species of the genns, but as it agrees with the  $\Im$  of the genns in having a single middle spur on the hindtibiae I place it here for the present. I have seen a  $\Im$  from the same locality, which at the time I passed over as an abnormally coloured and little marked example of G, uniformata Warr.

## 73. Craspedia atridiscata spec. nov.

Forewing: pale grey, washed with flesh-colour, and dusted with black atoms; the lines blackish, but somewhat ill-defined; first from one-sixth of costa, outcurved above median and marked by black dots on subcostal and median veins, then strongly oblique to near base; median shade broad, dark grey, from two-thirds of costa, outcurved above, then oblique to middle of inner margin; outer line at five-sixths, fine, parallel to median shade, and marked by black points on veins, reaching inner margin at three-fourths; followed by an obscure darker shade; a series of marginal dark dots; a triangular grey cloud on hindmargin below apex, produced obliquely across outer line to join median shade beyond cell; cell-spot a small black ring with white centre; fringe worn.

Hindwing: basal half whitish, without flesh-coloured tint; a straight black antemedian, and slightly curved median line; between them a large oval black cell-spot with pale central dot; the rest as in forewing.

Underside dull flesh-coloured grey, speekled with darker in forewing, much paler in hindwing; cell-spots distinct; the lines indicated, but obscurely.

Face and palpi black-brown; vertex, thorax, and abdomen flesh-coloured grey; front of collar dark grey; segmental rings of abdomen blackish.

Expanse of wings: 30 mm.

1 & from Chulumani, Bolivia, 2000 m., December, wet season (Simons). Not nearly allied to any known Craspedia.

#### 74. Craspedia conduplicata spec. nov.

Forewing: chalk-white, dusted sparsely with coarse black atoms; the costal area with fine fuscous speckling; the lines black, lumnlate-dentate, and all double; outer line at two-thirds, the two arms diverging towards costa, the outer marked by two dark wedge-shaped marks on veins 6, 7; submarginal line with the outer arm close to margin and somewhat obscured; marginal line black, swollen into black triangles between the veins; fringe white. The basal half seems to have lost its markings; but from traces along inner margin I am led to believe that there is a double inner line at one-third, and probably a black cell-spot.

Hindwing: with the outer lines as in forewing; the branches of the median line farther apart, the inner one semicircularly curved inwards and embracing the distinct black cell-spot.

Underside white, tinged with dull grey towards base and costa of forewing; the markings showing through only.

Face and palpi dark brown above, whitish below; collar light brown; vertex white; thorax and abdomen white with coarse dark speekles.

Expanse of wings: 27 mm.

1 & from San Ernesto, Bolivia, 1000 m., August, September 1900 (Simons). Distinguished from *eburneata* Guen. and its allies by the much larger size.

#### 75. Craspedia deaurata spec. nov.

Forewing: dull greyish yellow; markings very obscure; traces of a curved line near base, an oblique slightly deeper yellow shade beyond middle, and a very fine denticulated brownish outer line; fringe concolorous; cell-spot oval, brown, distinct.

Hindwing: the same.

Underside dull yellow; costa of forewing dull reddish near base only; a dark marginal line to both wings; cell-spots obsolete.

Face and palpi black-brown; vertex pale; thorax and abdomen dull yellow.

Expanse of wings: 16 mm.

1 & from Salidero, N.W. Ecuador, 350 ft., February 1901 (Flemming and Miketta).

Shorter and broader in the wing than C. rasa Warr., and quite different in colour; antennae with long fascicles of cilia.

## 76. Craspedia dorsinigrata spec. nov.

Forewing: ochreons, finely black-speckled; the lines pale brownish, diffuse and broad; first line obscure, curved at one-fourth; median shade very broad, oblique from before middle of inner margin towards apex, obsolete above vein 6; exterior line very fine, touching the inner submarginal shade and marked by distinct black spots on the veins; marginal dots black; cell-spot blackish; fringe concolorons.

Hindwing: with the shade antemedian, preceding the cell-spot; outer line well separated from submarginal.

Underside paler, with the cell-spots and onter line distinct; costal half of forewing grey-tinged.

Face and palpi brown above, ochreous below; vertex whitish; collar brown:

thorax and abdomen like wings; abdomen in the  $\delta$  with five black spots on dorsum.

Expanse of wings: 36 mm.

2 ♂♂, 2 ♀♀, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

Wings narrow and elongate; hindwings with distinct tooth at middle of hindmargin, convex above, concave below. Like napariata Guen., but larger.

#### 77. Craspedia internexata spec. nov.

Forewing: bone-colour, with slight blackish dusting; the markings ochraceous; basal line obscure, bent below costa, then oblique; median shade from below costa at two-thirds to middle of inner margin, preceded by a distinct black cell-spot; the exterior line and the inner of the two subterminal shades both lumulate-dentate and coalescing to form a fascia, insinuate beyond cell and in submedian interval, connected below costa and below median by ochreous streaks with the median shade; marginal area ochreous, leaving the submarginal line broad and well marked, consisting of irregular lunate patches; marginal spots black, distinct, each preceded by a small pale space; fringe bone-colour.

Hindwing: with the median shade of forewing produced as a straight ochreons antemedian band, followed by the black cell-spot; the rest as in forewing; the band formed by the two connected lines much swollen towards costa.

Underside paler; cell-spots and marginal spots in both wings; the fascia shown only in the forewing, fuscous-tinged at inner margin.

Face, vertex, thorax, and abdomen all pale; palpi externally and front of forelegs dark fuscous.

Expanse of wings: 21 mm.

1 9 from Salidero, N.W. Ecuador, 350 ft., February 1901 (Flemming and Miketta).

This seems distinct from the other species with white face; the hindmargin of hindwing is very visibly angled at middle, and crenulate on each side.

#### 78. Craspedia trias spec. nov., and ab. tincta nov.

Forewing: pale ochreons, somewhat thickly dusted with black atoms; the lines ochraceous; first at one-fourth, outcurved to the submedian fold, then vertical; median parallel to it, outcurved round the black cell-spot; outer line at quite three-fourths, oblique outwards to vein 6, there acutely angled and obliquely incurved to 4, where, after a blunter angle, it is again oblique inwards, dentate-lunulate to inner margin; the two submarginal shades quite narrow, and irregular, the inner one approaching outer line at 6, the outer running close to hindmargin: marginal dark dots small; fringe ochreous, without dots.

Hindwing: similar, but without basal line, the median line antemedian.

Underside pale ochreons, dusted with grey in forewing: cell-spots distinct, black; outer line of forewing only plain.

Head, face, thorax, and abdomen all ochreous, the last dusted with dark scales: palpi externally and front of forelegs dark fuscous.

Expanse of wings: 22 mm.

Very much like C. approbata Warr., with which and atomaria Warr., it agrees in the pale face; but distinguished by the course and shape of the outer line.

I & from Chulumani, Bolivia, 2000 m., January 1901, wet season (Simons), type; 1 ♀ from Bartica, British Guiana, May 1901, and 1 ♀, Bulim, N.W. Ecnador, 160 ft., January 1901 (Flemming & Miketta).

In this type form the lines are clear and distinct, being deeper coloured than the pale ochreons ground. In a second  $\mathcal{E}$ , however, from R. Inambari, E. Peru, 1000 m., July 1900, rainy season (Simons), which may be called ab. tincta, this is not the ease, as the whole surface of the wings is suffused with the deeper tint, to the obliteration of the lines, except the submarginal, which is of the usual pale ochreons tint; in this form the space between outer and submarginal lines beyond cell and on submedian fold is filled up with a patch of brownish scales, and the marginal dots are larger.

#### 79. Craspedia trygodata spec. nov.

Forceing: pale stone-grey, dusted with olive-green scales; these are especially thick along costa and hindmargin; the lines dark olive-green; first thick, from one-fourth of costa, bent outwards in cell before the distinct black cell-spot, then oblique to near base of inner margin; median line fine, dentate-lunulate, from two-thirds of costa to before middle of inner margin, bent outwards between veins 6 and 3; outer line at five-sixths, close to margin, lunulate-dentate, insinuate at costa, beyond cell, and in submedian interval, and in the sinuses marked thicker, closely followed by an olive shade, most conspicuous in the sinuses; dark green marginal spots between the veins and minute dots beyond the veins in the fringe, which is concolorous.

Hindwing: the same, without basal line.

Underside paler, subiridescent: forewing tinged with rosy-grey; the external markings distinct, brownish olive; marginal line continuous.

Face and palpi dull rosy above, pale below; thorax and abdomen like wings.

Expanse of wings: 32 mm.

3 & from Chulumani, Bolivia, 2000 m., January 1901, wet season (Simons).

Wings clongate; apex prominent; hindmargin oblique, in hindwing crenulate; antennae with long fascicles of cilia.

## 80. Dichromatopodia distans spec. nov.

Forewing: dingy red-brown, tinged with darker; the lines ochreons with the brown scales deeper on each side of them; first line at one-third, bent on subcostal vein, then straight, slightly oblique inwards; outer line at four-fifths, much nearer the margin than in sigillata Wlk., outcurved from costa, then parallel to margin; a diffuse brown cell-spot, immediately followed by a darker median shade; a dark marginal line interrupted by the veins; fringe concolorous.

Hindwing: similar, but without inner line.

Underside straw-colour, pink-tinged; costa of forewing, outer line and marginal area beyond it, and the cell-spot rosy. Hindwing with cell-spot and outer line rosy; the margin only tinged with that colour.

Head, thorax, and abdomen like wings; anal segment and underside of abdomen ochrons; face deep-red above, whitish below.

Expanse of wings: 22 mm.

1 & from Onaca, Sta. Marta, June to August (Engelke); also from Maraval. Distinguished by the nearness of the outer line to the hindmargin.

### 81. Haemalea atridiscata spec. nov.

Forewing: cream-colour, dusted with black specks; costa dull red-brown, widening towards apex; the lines all diffuse and obscure, olive-ochreous, thickened towards costa; first at one-fourth, enrved; median outcurved round the cell to submedian vein, then curved outwards, subdentate; onter line at three-fourths, oblique to vein 6, strongly insinuate beyond cell, then oblique, marked with black dashes on veins, and a larger black spot on vein 5, denticulate; two sinuous submarginal shades; marginal line dark olive, fine; fringe dull-red; cell-mark large and prominent, forming a thick black vertical blotch on discocellular.

Hindwing: without basal line, the other four curved and very indistinct; a minute black cell-dot; fringe red.

Underside cream-colonr; costa of forewing, fringe, and middle and outer line of forewing dull red; forewing suffused towards base with pale brownish.

Face and palpi black-brown above, whitish below; vertex white: collar brown; thorax and abdomen cream-colonr, the latter with a dorsal row of dark spots.

Expanse of wings: 28 mm.

2 & &, 2 & \$, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November, December 1901, wet season (Ockenden).

Distinguished from II. vinocinctata Guen., which otherwise it resembles, by the quite different cell-spot of forewing.

# 82. Heterephyra pustulata spec. nov.

Forewing: deep yellow; the lines dark grey; first at one-fourth, outcurved above and below the median vein; median and outer parallel to each other, at one-half and two-thirds, dentate-lumulate, insinuate beyond cell, incurved below middle and again insinuate on submedian fold; a submarginal row of spots between the veins, the two beyond cell and in the submedian interspace swollen into black blotches; beyond these close before margin a row of brown markings on the veius; a row of black marginal lumules; fringe concolorous; cell-spot large, leaden-grey with black edge.

Hindwing: like forewing, but without basal line; the centre of cell-spot paler; an additional black blotch in submarginal line at apex.

Underside like upper, but the markings less distinct.

Head, thorax, and abdomen like wings; abdomen with third segment blackish; face grey; abdomen beneath and legs yellowish.

Expanse of wings: 35 mm.

2 9 9 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., January 1902, wet season (Ockenden).

# 83. Lipomelia scintillans spec. nov.

Forewing: pale ochreous, glistening, appearing shagreened with darker; costal edge at base reddish; no distinct lines visible in the  $\mathcal{S}$ , except at costa, where they are reddish, at about one-half and three-fourths; in the  $\mathfrak{P}$ , which are slightly darker (one especially), the lines are plain and leaden-coloured; the first from middle of costa to middle of inner margin, slightly elbowed ontwards

on median vein; the onter oblique outwards and angled on vein 6, then irregularly waved and dentate, parallel to hindmargin; traces of a median line near beyond the first; fringe concolorons.

Hindwing: with a darker cell-spot, and traces of a curved outer line in the ? only.

Underside pale and glossy; costa of forewing rosy.

Face and palpi above, front of forelegs, and antennae red: face and palpi below, thorax and abdomen ochreous, like wings.

Expanse of wings: 16 min.

1 3, 3 ♀♀ from Bartica, British Guiana, April, May 1901.

A very distinct insect, though of obscure appearance.

#### 84. Lipomelia subfuscata spec. nov.

Forewing: dull greenish opaline, with a slight rosy tinge, and speekled with black; cell-spot white, erescent-shaped, occupying the middle half of discocellular, not touching vein 4 or 6; onter line darker, distinctly lumnlate-dentate, the teeth aentely pointed ontwards, the lumnles inwards, from three-fourths of costa to three-fourths of inner margin; indistinct traces of a dark inner line at one-third, and a median dentate-lumnlate line between; marginal area deeper, and with a dull smoky blotch at anal angle; fringe pinkish green.

Hindwing: with basal third concolorous with forewing, the rest dull rosy; cell-spot black, occupying the upper half of discoccilular, broader above, where it touches the subcostal vein, which, as well as vein 7, is marked with black scales; outer line from costa to vein 6 black, strongly dentate-innulate, obsolescent below; the lunules followed by two black spots; the whole apical angle tinged with brown, containing two black marginal lumnles one on each side of vein 7; fringe rosy.

Underside pale greenish opaline, the costa of forewing rosy; anal angle of forewing marked by a large smoky-black blotch reaching vein 4, there becoming submarginal and dull rosy, thinning out towards costa; a similar but smaller blotch at apical angle of hindwing; fringe dark beyond the blotches.

Thorax and abdomen concolorous with wings; vertex, face, and palpi dull reddish.

Expanse of wings: 34 mm.

2 & & from Chimate, Bolivia, 760 m., September 1900 (Simons).

Neither specimen is in good condition, as far as the forewings are concerned, and the markings, except the outer line, are very obscure; possibly, when fresh, these wings are rosier in colour. It comes nearest to L. sublineta Warr.

### 85. Odontoptila marginata spec. nov.

Forewing: bone-colour, dusted with fine purplish brown scales; the costa diffusely, the hindmargin beyond outer line to below apex concisely, purplish brown; first line marked by black spots on veins, at one-third, angled in cell before a small dark cell-spot, which is followed by a faint median shade parallel to first line; outer line black, sinnous, parallel to hindmargin, interrupted above vein 6 and there marked by vein spots, and retracted to costa at three-fourths; submarginal line pale, broken into spots, bisecting the dark marginal area, the upper edge of which runs obliquely into apex; marginal line black; fringe with pale base and tips, and broad brown middle line, mottled darker beyond veins.

Hindwing: with basal two-thirds bone-colour dusted with darker, an antemedian shade preceding cell-spot; outer line punctulate; marginal area as in forewing, but not so dark.

Underside the same, but paler and duller.

Head and thorax purplish black; abdomen brown with black dorsal streak; vertex and antennae snow-white.

Expanse of wings: 19 mm.

1 & from Chulumani, Bolivia, 2000 m., December, beginning of wet season (Simons). Near O. brunnea Warr. from Brazil.

### 86. Pigia semicostata spec. nov.

Forewing: white, the markings grey; costa finely grey, more broadly towards apex, before which there are four oblique fuscous streaks, representing the commencement of as many lines; a curved grey inner line, very indistinct; a diffuse straight oblique median shade from before middle of inner margin towards apex, retracted to first costal spot at vein 6, darker marked on veins; outer line dentate-lunulate, from two-thirds of inner margin, marked by black dashes on the veins, also retracted at vein 6 to the second costal spot; two submarginal diffuse dark grey wavy shades, curving inwards to the first and second spots, these also sometimes marked with dark lines on the veins; a series of black marginal dashes; fringe white, with darker basal line; cell-spot small, blackish.

Hindwing: with all four lines diffuse and dentate, and parallel to each other.

Underside dull whitish, the forewing stained with grey.

Face, palpi, and vertex black; collar pale brown; shoulders and patagia white; abdomen white, tinged with grey.

Expanse of wings: 3, 22 mm.; 9, 24 mm.

1  $\delta$ , 1  $\circ$ , from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden). Both ground colour and markings are paler in the  $\delta$  than in the  $\circ$ .

### Pseudasellodes gen. nov.

Forewing: with costa straight, but strongly convex before apex, which is subfalcate; hindmargin with a small tooth at vein 7, and two teeth at veins 3 and 4, above and below which the margin is concave.

Hindwing: fully developed; both angles well marked; a strong tooth at end of vein 6, and a smaller one at vein 4, the margin between strongly excised.

Antennae of 3 subserrate with very long ciliations; palpi quite short; tongue and fremulum present; hindlegs of 3 aborted.

Neuration: forewing, cell about half as long as wing; discocellular oblique; first median nervule at one half, second well before end of cell; lower radial from upper fourth of discocellular, upper from upper angle; 7, 8, 9 stalked from before end of cell, 10 and 11 stalked from middle, 10 anastomosing with 8,9; hindwing 6 and 7 stalked; radial from centre of discocellular; vein 2 absent, or with basal fourth only developed.

Type P, constellata spec, nov.

Differs from Asellodes in the hindwing of  $\delta$  being not aborted and contorted along inner margin and anal angle.

#### S7. Pseudasellodes constellata spec. nov.

Forewing: pink, dusted with dark scales, and tinged in places with brownish red; costal area from near base to near apex greyish ochreous; central area occupied by a large triangular hyaline space, separated into two parts by a narrow curved dentated belt of ground colour; the inner part occupying the outer half of cell and the space immediately beyond the discocellular, between the subcostal and median veins; the outer part is transverse in direction with curved edges, reaching from vein 8 to 2, the veins crossing it scaled; below the inner blotch lying on vein 2 is a smaller 8-shaped hyaline spot; the inner line, slightly deeper than the ground colonr, starts from costa near base, running parallel to inner margin, and edging the pale costal streak, and is then vertically sinuate to inner margin, angled outward on submedian vein; the submarginal line is fine, irregularly waved and bent, forming two rounded lobes on veins 3 and 4 filled up with yellow, and running in obliquely to inner margin before anal angle; it is preceded by a darker cloud with dentate edges, in which the veins show pale, which runs obliquely to inner margin beyond middle; marginal line red-brown; fringe redbrown at the teeth, white between.

Hindwing: with an irregular trilobed hyaline blotch at and beyond end of cell with two smaller spots contiguous, below median and above subcostal vein: three smaller isolated spots before postmedian line, one on each side of vein 6, the third on vein 2; also two minute spots at base; postmedian and submarginal lines close together, the former obscure, the latter lumulate-dentate and distinct; marginal area from apex to tooth at vein 6 filled up with deeper red.

Underside glaucous grey, the marginal areas alone reddish-tinged.

Vertex, antennae, face, and under-surface of palpi white; palpi fuscous above; thorax and abdomen reddish, like wings.

Expanse of wings: 40-44 mm.

4 33 from Pern.

# 88. Ptychopoda curtaria spec. nov.

Forewing: rather glossy ochreons, with excessively minute dark dusting; crossed by five hardly darker waved bands, which can only be detected in certain lights: antemedian, median, postmedian, and two submarginal; a small round black cell-spot; a row of marginal dots, exceedingly minute, at the ends of the veins; fringe pale ochreous.

Hindwing: without first line.

Underside ochrons, the bands showing only on the forewing; cell-spots large, black.

Thorax and abdomen concolorons with wings; vertex paler; face and palpi brown-black.

Expanse of wings: 12 mm. 1 & from Jamaica (Taylor).

## 89. Ptychopoda griseocostata spec. nov.

Forewing: blood-red, speckled with yellow; costa from base to beyond middle broadly dull pale grey, edged below with a streak of dull black; costa towards apex narrowly yellow; hindmargin narrowly yellow, except at apex and middle, where the blood-red ground colour runs through into the yellow fringe:

Hindwing: with a large silvery white cell-spot; fringe yellow.

Underside of both wings dull red; fringe yellow.

Head and palpi deep red; shoulders silvery whitish; thorax and abdomen red like wings.

Expanse of wings: 17 mm.

2 & & from Bulim, Ecuador, February 1901, 160 ft. (Flemming & Miketta).

### 90. Ptychopoda inanis spec. nov.

Forewing: pale stone-colour, thickly dusted with greyish ochroons scales; the lines very obscure, waved, greyish ochroons; the first from costa at one-third to inner margin at one-third, strongly angled in cell in midwing, before the distinct small black cell-spot, then oblique; the cell-spot at quite three-fifths of the wing, followed by three lines parallel to hindmargin, corresponding to the usual median, outer, and subterminal; slightly darker marginal dashes; fringe paler, with small dark dots at base beyond the veins.

Hindwing: similar, but without a basal line.

Underside of hindwing like upper; of forewing thickly suffused with fuscous grey; cell-spots and outer line indicated.

Vertex, thorax, and abdomen concolorous with wings; face and palpi dark brown.

Expanse of wings; 13 mm.

1 & from Jamaica.

The whole insect has a dusty look, owing to the coarseness of the dark scales.

### 91. Ptychopoda lignicolor spec. nov.

Forewing: uniform pale wood-colour, undusted except along costa, which is broadly speckled with dark grey atoms; the lines pale brown; first at one-third, nearly vertical, but slightly bent outwards at the median vein; second line faint, from two-thirds of costa to middle of inner margin, outcurved above and incurved below middle, vertical from submedian fold; outer line at five-sixths, parallel to hindmargin, and marked darker on costa; a fine dark marginal line; fringe concolorous, with brown spots in middle beyond the vein-ends; cell-spot brown.

Hindwing: without first line.

Underside of forewing whitish, suffused except along inner margin with iron grey; the veins, cell-spot, onter and marginal lines blackish; costal edge and fringe yellow, the latter with the dark spots large and prominent. Hindwing without dark suffusion.

Head brown-black; thorax and abdomen concolorous with wings.

Expanse of wings: 17 mm.

1 ? from Popayan, Colombia (Lehmann).

The hindmargin of forewing is slightly, of hindwing deeply inbent between veins 4 and 6. Easily distinguished by its unusual colour.

## 92. Ptychopoda nepticulata spec. nov.

Forewing: pale grey, dusted with darker grey; the lines dark grey: the basal and median starting from large black costal spots, both angled in cell then oblique inwards; the basal area as far as the median line darker than the

rest of wing; onter line at three-fourths, indented beyond cell and on submedian fold; the area between it and median line paler; submarginal line pale, sinuous between grey shades, that which precedes it being more prominent and forming a narrow band; fringe grey, with large black dots at base; cell-spot black, at three-fifths of wing.

Hindwing: the same, but without basal line, and only the basal third, as far as the antemedian line, darker than rest of wing.

Underside dull grey. Face and palpi blackish; thorax and abdomen grey. Expanse of wings: 10 mm.

1 & from Cindad Bolivar, Veneznela, July 1898 (S. Klages).

Quite the smallest member of the family; the forewing is elongate and narrow.

### 93. Ptychopoda nigricosta spec. nov.

Forewing: yellow, with four rosy waved oblique shades, all with dentate elges, and insinuate inwards in and beyond cell and across submedian fold; cell-spot and a fine marginal line also rosy; fringe yellow; costa blackish throughout.

Hindwing: with three similar lines; the base of both wings rosy.

Underside duller; the costal area more broadly blackish.

Face, palpi, and vertex black-brown; thorax and abdomen yellow; front and sides of shoulders shining white.

Expanse of wings: 16 mm.

2 & d from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

Like P. quadrirubrata Warr., but distinguished by the blackish, not rosy, costa.

### 94. Semaeopus signifer spec. nov.

Forewing: greyish ochreous, dusted with very minute reddish scales, the costal region broadly greyer without the ochreous tint; lines very pale brownish; basal line at one-fourth, a little outcurved above and below median, and slightly darker dotted on veins; median shade dentate-lunulate, oblique from three-fourths of costa to middle of inner margin; outer line near hindmargin, marked by distinct brown-black spots on veins; hindmargin slightly crenulate; fringe concolorous, with minute reddish dots at base beyond the veins; cell-spot reddish-brown.

Hindwing: without basal line; median shade, outcurved round the cell-spot, which is a black ring with a red streak across it; the rest as in forewing.

Underside glossy ochreons; the forewing only dusted with grey towards base; cell-spot and median shade marked only on forewing; outer line and a black marginal line on both wings.

llead, thorax, and abdomen like wings; palpi externally and upper third of face dark purple; tuft of hindlegs large, ochreous, concealing a smaller rosy tuft.

Expanse of wings: 44 mm.

1 & from Charaplaya, Bolivia, 1300 m., June 1901 (Simons).

Differs from true Semucopus in having sessile fascicles of cilia instead of pectinations,

#### 95. Zeuctoneura subviridis spec. nov.

Forewing: dull greenish ochrous; inner line at one-fourth and median from one-half of costa, both obscurely marked, bent in middle of wing, then oblique inwards; onter line at three-fourths, blackish, sinnous, incurved beyond cell and on submedian fold, followed at anal angle by a dark blotch; marginal line slightly darker; fringe dull green, mottled with darker beyond veins.

Hindwing: with obscure antemedian and outer lines, and a small black

cell-dot.

Underside much paler, ochreous slightly green-tinged; forewing rosy along costa and veins; base of forewing grey; a blackish median line, and thick black outer sinuous line, the black running out along the veins; marginal line black; fringe ochreous, mottled with black. Hindwing with small cell-spot and thick black outer line, followed by a blotch at apex.

Head black; thorax and abdomen like wings.

Expanse of wings: 22 mm.

3 &&, 2 & \$, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., January 1902, wet season (Ockenden).

The black of the outer lines below shows through in parts on the upperside.

#### SUBFAMILY HYDRIOMENINAE.

#### Anapalta gen. nov.

Agreeing with *Epirrhoë* in neuration; distinguished by the palpi and antennae; the palpi are upcurved or porrect in front of face, the third segment erect; the antennae are lamellate, and quite simple, without even short ciliations.

Type: Anapalta acerbata Feld.

Quite a large number of S. American species will be found referable here.

### 96. Anapalta caliginosa.

Hammaptera caliginosa Warr., Nov. Zool. vii. p. 177, ♀ (1900).

This species, described from a  $\mathfrak P$  only, was doubtfully referred to Hammaptera. The insect proves, however, not to belong to that genus; the inner margin of the hindwing of the  $\mathfrak S$  is simple. The  $\mathfrak S \mathfrak S$  are, as a rule, paler than the  $\mathfrak P \mathfrak P$ , and more brightly coloured; the pale cream-coloured band before central fascia sometimes becomes olive-green, like the band following the fascia, while the central area is varied with brown and olive-green; all the lines are more distinct; the hindwing is glossy white, with the inner marginal area greyish olive; no darker marginal border, but on-the inner margin above anal angle are the commencements of two blackish lines, which in some instances can be traced across the wing as curved grey lines.

5 & of from Charaplaya, Bolivia, June 1901, 1300 m. (Simons).

## 97. Anapalta infundibulata ab. vinosata nov.

Differs from the ordinary form of Guenée's species in having the basal twothirds of forewing suffused with vinous red, the central fascia being entire from costa to inner margin; the ontersthird is whitish grey, with all the markings very concisely and clearly expressed.

In the hindwing and underside it agrees with the type-form.

1 & from Chanchamayo, June to August 1901 (Hoffmanns).

#### 98. Anapalta perdecora spec. nov.

Foreving: cream-white, tinged with buff, and in the basal and marginal areas suffused with violet-grey: lines slender, waved, all black towards costa; extreme base grey; basal patch small, buff, edged by a black line and crossed by two lines which are black only at extremities: band between basal patch and central fascia suffused with violet-grey as far as subcostal vein only, traversed by wavy lines, varied with grey and whitish; central fascia pale buff, its edges deeper, the cross-lines black only on costa, central space paler still, with a black cell-spot; outer edge dark nearly across wing, indented beyond cell and forming two blunt, strong teeth between veins 2 and 4; marginal area below subcostal vein tinged with violet-grey, with two or three waved and dentate dark lines most distinct in upper half; submarginal line yellow, only plain beyond cell, where it is represented by two or three yellow lunular spots in the grey tint, lost below middle in the yellow marginal space; apical blotch yellow; black marginal lunules, interrupted at vein-ends, and partially interrupted each in middle; fringe pale violet-grey, chequered with darker.

Hindwing: white with a very faint yellow tinge; slight dark marginal lunnles

and marks of lines along inner margin.

Underside pale yellowish; all the markings of forewing purplish grey; subbasal area with grey suffusion; onter edge of central fascia with three thick lines; band beyond it pale; apical area grey, with apex yellowish white; none of the markings reaching inner margin. Hindwing without markings, but the lines are indicated faintly on costa; cell-spots in both wings.

Head, collar, and shoulders yellow: thorax, patagia, and back of abdomen purple-grey, the last sometimes varied with yellow; underside of abdomen and

the legs yellowish : palpi externally purplish.

Expanse of wings: 38 mm.

3 & from Chulumani, Bolivia, 2000 m., January 1901, wet season (Simons)

## 99. Anapalta roseoliva spec. nov.

Forewing: cream-colour, suffused with pale green and rosy; the basal patch, the limiting bands of the central fascia, and the marginal area olive-green; basal patch small, with three black dots on its costal edge, followed by a curved band of ground colour narrowed at inner margin, the centre of which is dusted with rosy scales; the curved green inner band of central fascia is edged inwardly with velvety black, which fills up the whole band below the median and a great part of it above; outer green band broader, edged outwardly by a black line, which is sinuous outwardly from two-thirds of costa to vein 4, below 4 forming the usual prominent tooth and four smaller lumulate ones below it, but searcely edged with black; middle space of the ground colour dusted with reddish, and containing a dark linear cell-mark; beyond the fascia is a white line, followed by an area of rosy scales mixed with olive-green, and sometimes grey, towards costa, and bounded by the very indistinctly marked lunulate submarginal line, beyond which the margin is entirely green; pairs of small black spots at the vein-ends; fringe pale green, with dark chequering beyond veins; all the lines are marked with black on costa.

Hindwing: cream-colour, without markings, slightly tinged with olive and rosy along bindmargin; traces of two dark lines on inner margin above anal angle.

Underside cream-colour, washed with olive; cell-spots and outer line dark, the latter followed first by a pale band and then by a diffuse darker one, expanding into a dark fuscous blotch below costa of forewing, touching margin below 6 and leaving the apex pale.

Head, thorax, and abdomen cream-colour, olive-tinged in places: patagia rosy; abdomen with a pair of black streaks on each segment. Forelegs and middle legs with the tibiae and tarsi mottled blackish and ochreous.

Expanse of wings: 26 mm.

4 33 from Charaplaya, Bolivia, 1300 m., June 1901 (Simons).

### 100. Anapalta sombrera spec. nov.

Forewing: dull greenish brown, coarsely dusted with dark scales; crossed by a succession of waved blackish lines, darker and plainer on costa; the limits of the basal area and central fascia cannot be well defined, the ground colour being uniform throughout; the central area is rather darker brown than the rest of the wing, and the black cell-spot stands in a darker band between two lines; a paler band at three-fourths is followed by a darker shade partially connected with hindmargin; a broken black marginal line; fringe mottled with black beyond veins.

Hindwing: dull brown, overlaid with rough dark scales, without any markings.

Underside dull greyish cincreous; costal area to middle and a broad post-median band dull luteous. Hindwing dull luteous speckled with fuscous, and with dull fuscous marginal border; dark cell-spots on both wings.

Head and thorax concolorous with forewing, abdomen with hindwing.

Expanse of wings: 25 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., January 1903, wet season (Ockenden).

A very dull and ill-marked insect, perhaps abnormally so.

# 101. Anapalta violetta spec. nov.

Forewing: basal patch, central fascia, and marginal area dingy olive-green edged and crossed by black wavy lines; spaces between basal patch and central fascia and between this and submarginal line pale violet; the costal portions of these also olive-green with dark streaks; the area around the black cell-mark in the fascia sometimes violet; pairs of black spots along margin at the veinends; fringe olive, dark-chequered beyond veins, and spotted with white at apex and between veins 3 and 4.

Hindwing: olive-grey or olive-ochrous, when fresh with traces of slightly darker postmedian and submarginal bands, edged with paler; marginal spots smaller; fringe pale.

Underside pale ochreous, suffused, especially in the forewings, with violetgrey; all the markings dark grey, tinged in parts with greenish.

Head, thorax, and abdomen pale ochreous; metathoracic tufts blackish; dorsal segments of abdomen edged with black.

Expanse of wings: 26-28 mm.

9 33 from Charaplaya, Bolivia, 1300 m., June 1901 (Simons).

#### Anisolasia gen. nov.

Forewing: costa somewhat shouldered at base, and strongly convex before apex; apex prominent; hindmargin oblique, very faintly sinuous; inner margin convex.

Hindwing: with apex rounded; hindmargin nearly straight from vein 6 to anal angle, which is square.

Antennae of 3 plumose, the pectinations unequal, those on the outside much longer than the inside row, but all very long, fine, and ciliated; the longest of the outer series about one-fourth as long as the shaft itself; forehead produced below: palpi porrect, rough-haired; tongue and frenulum present.

Nenration as in *Xanthorhoë*, but the lower radial of forewing rising distinctly above the middle of discocellular.

Type: Anisolasia napassa Dogn. (Cataclysme).

The type species is of small size and delicate structure, somewhat resembling the group of smaller South American species of Coenocalpe, apricata, emanata, etc.

#### 102. Diactinia albinodosa spec. nov.

Forewing: dark olive-fuscous; the lines and some of the veius pure white; the median vein and basal portions of the three median nervules white; a straight oblique white line near base, followed by a curved line, outbent above and below median, the two forming roughly the letter B: a black heart-shaped discal mark edged with white, its upper edge connected by a white streak above vein 6 with the broad white outer line, which runs from two-thirds of costa to three-fourths of inner margin forming a prominent blunt angle between veins 3 and 4; just before this are two waved brownish lines separated by darker fuscous; submarginal line waved, white, interrupted by the veins, which towards the hindmargin are all dull ferruginous, and preceded and followed by blackish blotches between the veins; marginal line of double black dashes; fringe olive-fuscous with darker dividing line, the whole concisely cut beyond the veins by fine pencils of white.

Hindwing: white, slightly grey-tinged; a dark discal spot and traces of two lines, postmedian and submarginal, distinct only on inner margin; paired black marginal dashes; fringe white.

Underside of forewing dull olive-grey, becoming fuscous towards apex and hindmargin; a dark cell-spot; outer and submarginal lines, and the dashes in fringe white. Hindwing whitish, dusted with grey; a dark cell-spot; a whiter postmedian band, angled in middle, and slightly edged with darker, especially on the veins basewards.

Head, thorax, and abdomen dark olive-fuscous, in places mixed with pale scales; vertex and collar whitish; tips of patagia dull ferruginous; abdomen with a white band at base and the segments whitish.

Expanse of wings: 42 mm.

1 & from Peru.

# 103. Dolichopyge canisparsa spec. nov.

Forewing: white, thickly dusted and tinged in parts with grey; basal patch edged by a curved blackish line, the extreme base darker grey; it is followed by a narrow curved pale grey band with dark line along middle; inner edge of

central fascia marked by a thick curved velvety blackish band, the outer edge from costa at three-fifths, oblique to vein 6, there rounded and vertical to vein 4, then incurved and lumlate to two-thirds of inner margin; this edge is margined with black inwardly from costa to vein 4 only, most thickly between 4 and 6; it is followed by a white line, and a grey black-edged band; apical portion of wing brown and grey mixed; submarginal line very obsenre; an interrupted black marginal line; fringe white chequered with grey, the basal half more distinct; the white ground colour is strongest at middle of central fascia, and is extended to hindmargin more or less between veins 2 and 4, partially obliterating the dark markings.

Hindwing: whitish, with traces of grey lines along inner margin; a grey cell-spot, and fine indistinct submarginal grey line; fringe white, chequered with grey only in basal half; marginal line blackish, interrupted.

Underside of forewing dull-grey, of hindwing whitish, grey-speckled; the markings indistinct.

Head, thorax, and abdomen dark grey.

Expanse of wings: 25 mm.

1 ? from Ecnador.

### 104. Dolichopyge fulvistriga spec. nov.

Forewing: wood-brown, speckled and suffused with grey; a fulvons streak along subcostal vein from base to near apex; basal patch grey-brown speckled with whitish, edged by a curved dark line, and traversed by two lines; inner edge of central fascia at one-third, thick, black; curved outwards and indistinct on costa, straight and oblique inwards from subcostal to submedian fold, then again bent inwards; from this line above the median vein a sinuous line runs to middle of inner margin, the space within it grey; onter edge of fascia oblique to vein 4, and slightly protuberant at 6, then oblique inwards, edged inwardly with blackish in upper half, and with two dark wavy lines across it; cell-spot linear, black; pale band beyond the fascia whitish at costa with a dark centre; submarginal line whitish, interrupted, preceded by a large dark blotch on costa and a smaller one beyond cell and above inner margin; fringe grey, chequered with darker.

Hindwing: grey, darker along hindmargin, with traces of a pale submarginal line, and dark beginnings of lines along inner margin; cell-spot black.

Underside grey in the forewing; the commencement of lines on costa blackish, with pale intervals: a broad subapical cloud; cell-spot black. Hindwing whitish speckled with black, and with all the lines blackish.

Face and vertex whitish; shoulders and patagia mixed, black and white; abdomen cinereous, tinged with brown, and with a silvery white basal ring.

Expanse of wings: 30 mm.

1 & from Chulumani, Bolivia, 2000 m., January 1901, wet season (Simons).

# 105. Erebochlora ruficostaria spec. nov., and ab. pernigrata nov.

Forewing: deep purple, crossed by irregular waved lumilate-dentate olive-green bands; the costa with a very broad smooth pale liver-coloured stripe; of the bands two are close to base; three are median, the second and third of these sometimes partially obsolete; and two postmedian, of which the first is curved

below the median, oblique and broad above, and the second sinuous from apex to anal angle; along the cell and above the median vein these green bands tend to become laterally confluent, and in one of the two examples form a pale green horizontal stripe from base to hindmargin; marginal oval green spots between the veins; fringe deep purple, except at extreme apex; fringe along inner margin bright vinous-red.

Hindwing: white, with a broad black border round hindmargin, containing a small white spot before and a larger one at apex; inner margin narrowly black; an irregular white blotch between veins 3 and 4 beyond the dark line that forms the inner edge of the marginal border; fringe black with white marginal dashes at base between the veins; the fringe round apex white.

Underside of forewing black, with three dull white streaks from base, one along costa, leaving the costal edge black, the second along lower half of cell, the third along submedian fold and inner margin, running to hindmargin, and crossed at three-fourths by a blackish shade; an oblique white streak from costal vein at two-thirds to vein 3; a white apical triangle. Underside of hindwing white, with black marginal border, interrupted externally at apex, and internally at anal angle, with white.

Head, collar, shoulders, and basal fourth of antennae concolorous with costal streak; patagia pale green at base, blackish green beyond; thorax and abdomen blackish green, the thorax and basal segment of abdomen with reddish scales intermixed; abdomen at sides and beneath dull cream-colour; legs fuscous, with pale joints; forelegs in front bright red.

Expanse of wings: 60 mm.

2 33 from Peru.

A form occurs, apparently of this same species, in which the costal streak is bright rufous, instead of liver-colour; above the median voin and along vein 4 a continuous pale greenish white streak runs from base to margin; and the whole hindwing above is black, except the small apical spot; underneath the examples are quite typical. For this aberration I propose the name pernigrata.

1 of from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., January 1903, wet season (Ockenden).

#### 106. Erebochlora sublactea spec. nov.

Forewing: deep blackish green, crossed by dull olive-green bands; basal patch olive-green edged with dark green scales; inner edge of central fascia straight, dentate wavy, from two-fifths of costa to middle of inner margin; the broad space between it and basal patch dull green, the edging finely whitish, and the centre darker tinged, also with a waved pale edging; outer edge of central fascia oblique outwards from three-fifths of costa, slightly indented beyond cell, forming two rounded projecting teeth between veins 2 and 4, then incurved and wavy to three-fourths of inner margin; towards costa this is also edged with white; the fascia is followed by a narrow dull green band; submarginal line wavy, bluish white, indented beyond cell, followed by irregular wedge-shaped dark green patches between the veins, and preceded beneath costa by a triangular blotch of three blackish green lines; a line of blackish marginal lumules between the veins; fringe blackish.

Hindwing: velvety brown with a dark rufous tinge; fringe the same.

Underside dull blackish fuscous, the basal third of forewing and the whole

of the hindwing, except a segment across hindmargin, bluish white. The hind-wing with distinct small black cell-mark on upper third of discocellular.

Head and vertex reddish, perhaps faded; patagia olive-green; thorax and basal segments of abdomen dark green mixed with rufous; rest of abdomen blackish green; abdomen and legs beneath pale.

Expanse of wings: 44 mm.

1 & from Peru.

### 107. Eriopygidia engelkei spec. nov.

Forewing: pale olive-green, slightly fulvous-tinged, especially at base and along costal region; the lines and bands darker green; basal patch edged by a thick diffuse dark green shade, angled on median vein, ending in a fulvous blotch on inner margin, with a similar more obscure line within it; central fascia narrow, dark olive-green edged with blackish; both edges strongly waved, deeply insinuate in cell, and less so on submedian fold; cell-spot black, large, and linear; the pale bands on each side of central fascia paler green without central lines; submarginal line dentate, pale green with a darker olive-green shade on each side, the teeth outwardly edged with velvety black wedge-shaped spots, produced as lines to the black marginal line, the preceding shade edged with black only at costa; fringe fulvous olive, chequered with dark beyond veins; all the lines thicker and blacker, and the intervals paler, towards costa.

Hindwing: small, fulvous orange, with the costal region broadly pale olive and the hindmargin slightly olive-tinged; fringe fulvous.

Underside of both wings uniform gilded yellow; outer margin of forewing tinged with olive; cell-spot of forewing linear, brown.

Head, thorax, and abdomen pale green, the dorsum tinged with fulvous; palpi externally and legs yellow.

Expanse of wings: 37 mm.

1 of from Onaca, Sta. Marta, June to August (Engelke).

Distinguished by the fulvous hindwing and fulvous tinge on forewing, as well as by the gilded uniform under surface, and comparative smallness of the hindwing.

# 108. Eriopygidia locuples spec. nov.

Forewing: a mixture of olive-green and rich deep vinous red, the olive ground colour showing only in the cross-lines; first line nearly straight from one-third of costa to near middle of inner margin, narrow and bright at costa, irregularly crenulate on each edge below, curving round at inner margin and running into the outer line; this rises at three-fifths of costa, runs obliquely outwards to vein 6, narrow and bright pale ochreous, followed below costa by two olive-green wavy lines which take its place below 6, forming a sinus beyond cell, then a bidendate projection between 2 and 4, finally running obliquely waved inwards to meet the inner line; submarginal line waved, finely olive-green, some of the lunules edged by bright pale ochreous; an oblique olive-green apical streak; the basal patch and central fascia are edged and crossed by deep blackish waved lines, among which can be seen in certain lights some waved dark green shades; across the basal patch an obscure pale green curved line; deep black marginal lunules between the veins; fringe vinous red, with a darker dividing

line and mottlings beyond veins; beyond the cell and below the oblique apical streak the submarginal line is interrupted by a triangle of rich deep vinous red.

Hindwing: black, with the apical third from near base of costa to hindmargin at vein 4 deep orange-red; fringe orange-red at base throughout, the outer half dark grey, becoming blacker towards anal angle.

Underside of forewing coppery red, with a black triangular blotch on inner margin below the median bounded by the outer line, with black projections from its upper edge, the inner being the cell-spot; two slight blackish costal streaks before apex, and a slight pale spot at outer line; marginal lunules finely black: fringe in basal half deep black, coppery beyond with black mottlings. Hindwing almost wholly brown-black, the copper ground colour only showing as striae; cell-spot, central curved line, submarginal line, and marginal shade blacker.

Palpi, head, and thorax vinous-red and black; abdomen black; pectus, abdomen beneath, and femora coppery red; outside of legs and tarsi spotted, red and black.

Expanse of wings; 39 mm.

1 % from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

Nearest to E. semirubra Warr., but of a totally different shade of colouring.

#### 109. Eriopygidia rufivena spec. nov.

Forewing: olive-green varied with deeper green; the edges of the basal patch and central fascia and the submarginal line greenish white; edge of basal patch from costa close to base to one-fifth of inner margin, preceded by dark green shading; inner edge of central fascia from nearly one-third of costa, outwardly oblique and projecting slightly in cell and forming a beak below median on vein 2; outer edge from nearly two-thirds of costa, projecting bluntly at veins 6 and 4, inangulate between, lumulate and oblique inwards below, joining inner edge above middle of inner margin; the fascia deep green on each edge, slightly paler at middle, with traces of a dark line beyond the obscure cell-spot; band before central fascia darkest at middle, this dark middle part angled parallel to the edge, and faintly paler-scaled along its margins; band beyond fascia pale olive-green, its lunnles paler-edged; submarginal lunules filled up with deep green, except those beyond cell, which are interrupted by a blackish green blotch externally; marginal lunnles blackish green with whitish bases, generally united by dark streaks with the dark edging of the lunules of submarginal line; a slight pale green streak from below apex to submarginal line; fringe olive-green, the tips paler, and mottled with dark beyond veins.

Hinawing: olive black-brown, the ends of the veins and the basal half of fringe deep red, the red running up blotch-like along veins 7 and 8; the post-median line marked by double red spots across veins 2, 3, 4.

Underside of both wings uniform fulvous; costa of both wings, inner margin of hindwing and fringes olive-green; a slightly paler shade marks the edge of central fascia; apex of forewing olive ochreous.

Head and thorax olive-green mixed with darker shades; face paler; palpi externally olive; abdomen greenish ochrous like the underside and legs.

Expanse of wings: 36 mm.

2 & d from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., January 1902, wet season (Ockenden).

Near to E. radiosa Dogn.; in his description of Cidaria placetimbarioides M. Dognin mentions one example differing from the rest of his specimens in having wholly dark hindwings with orange apex, which must be very near the present species.

### 110. Hammaptera aeruginata spec. nov.

Forewing: whitish, suffused throughout with dull rust-colour, the only pale spaces being the slender edges of the subbasal band, the postmedian band, and the submarginal line. The markings are exactly as in *H. constricta* Warr. from Argentina; the lines of the central fascia alone are dark marked, and these chiefly on the veins, but all the lines are marked by a black costal spot; in the shade preceding the submarginal line the lumnles beyond cell are conspicuous, being filled in with blackish; the lines and shades of the apical quadrate patch (in this case of the same tint as the rest of the wing) are continued through to inner margin; in constricta the anal space is clear white.

Underside yellowish white, with the same markings as in constricta.

Head, thorax, and abdomen concolorous with wings, the segments of the last with dark pale-edged rings.

Expanse of wings: 30 mm.

1 & from Chulumani, Bolivia, 2000 m., January 1901, wet season (Simons). This may be a local form of *H. constricta*, but it is very distinct in appearance.

### 111. Hammaptera apicata spec. nov.

Forewing: whitish, tinged with flesh-colour, especially along costa: the markings fuscous; basal patch small, its edge vertical, with three blackish lines; band before central fascia broad, with an obscure grey-edged middle space; central fascia of nearly even width throughout, the outer edge angled on veins 6 and 4, insinuate beyond cell and on submedian fold; its edges consisting of three black lines each, distinct above median vein, and containing a black cell-spot; lower part of fascia filled up with fuscous, which sometimes extends to costa also; the pale band beyond it traversed by a darker line, edged at costa by a dark oblique line, and followed by two more, which are often fused together; the whole apical space forming a subquadrate dark patch to vein 4, through which the pale waved submarginal line and an oblique apical streak are visible; marginal area below 4 with the markings more or less obsolete, being traceable only in very good examples; pairs of marginal spots at vein-ends; fringe flesh-coloured ochreous, varied with dark grey.

Hindwing: flesh-coloured ochreous, slightly grey-tinged, with obscure traces of grey marginal border and postmedian line and cell-spot; marginal spots as in forewing; fringe ochreous.

Underside with a square black apical blotch on forewing, the apex itself remaining ochreous; the outline of central fascia grey above the median vein; cell-spot plain. Hindwing with narrow grey submarginal band, indented grey postmedian line, and dark cell-spot; basal area to postmedian line tinged with grey.

Face and vertex ochreous; thorax and abdomen much suffused with fuscous; segments of abdomen with dark bands; palpi ochreous with fuscous tips; legs ochreous, the fore- and midtarsi blackish-spotted.

Expanse of wings: 32 mm.

2 & S, 1 ♀, from Sapucay, near Villa Rica, Paraguay, July 1901 (Foster).

#### 112. Hammaptera cacuminata spee, nov.

Forewing: whitish, tinged with olive-grey, the lines indistinct and blurred, all marked by black costal spots; basal area suffused with a deeper green tinge, extending partially along costal portion of central area; basal patch edged by an olive-green shade, and crossed by one or two darker lines; the band beyond also suffused with olive; inner edge of central fascia slightly indented at middle, onter oblique outwards and forming two projecting teeth between veins 2 and 4, the ends of which stand out velvety black from the pale ochreons green fascia; cell-spot dark, followed by a cross-line which is black at costa; apical area occupied by a dull blurred brownish olive subquadrate blotch, reaching vein 4; the submarginal line regularly waved and pale, the space before it pale brown in the patch and greenish beyond, greenish white on both sides below vein 4; the lunules beyond cell edged on both sides with black; band between central fascia and apical blotch whitish to vein 4; marginal black spots in pairs; fringe ochreous with dark mottlings beyond veins; all the lines darker along inner margin.

Hindwing: dirty ochreous, paler towards apex; two indistinct darker lines above anal angle; marginal spots distinct; fringe ochreous, tinged with grey towards anal angle.

Underside pale ochreous, with black markings; outer half of central fascia black to vein 2; a deep black marginal border, interrupted between veins 3 and 4, then fading out, the extreme apex ochreous; fringe ochreous, marked with blackish. Hindwing with black border throughout: a postmedian line, oblique from middle of costa to below vein 4, thence waved, parallel and close to marginal border to inner margin: the enclosed area black-speckled, with black cell-spot; fringe ochreous.

Head, thorax, and abdomen greenish ochreous.

Expanse of wings: 37 mm.

2 9 9 from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

Related to *II. cocama* Schaus, possibly a form of the ? of that species.

#### 113. Hammaptera nigrolineata spec. nov.

Forewing: yellow ochreous, with the lines slightly deeper yellow; the edges of the markings black; basal patch with an obscure dark edge, sinnous; inner edge of 'central fascia finely black throughout and waved, parallel to basal line; outer edge oblique outwards, angled below vein 4, strongly marked above middle, obsolete below, the traversing lines marked by black dots on costa and with black shading on and below submedian vein; three black lines from costa, not reaching vein 6, before submarginal line, which is whitish and lumulate, the lumules preceded by a series of black spots, that between veins 4 and 5 conspicuous, and followed by wedge-shaped black marks reaching hindmargin; marginal black spots in pairs; fringe ochreous.

Hindwing: suffused with dirty grey to an indistinct submarginal line, followed by a paler band: marginal border blackish, extending partially along the fold of inner margin; marginal dark spots and fringe as in forewing.

Underside of forewing with black marginal band, broad at costa, where it leaves the apex ochreous, narrowing and fading out below vein 4; edges of central fascia showing through only: hindwing with grey margin showing pale spots between veins; a submarginal grey shade and the fold grey-tinged.

Head, palpi, thorax, and abdomen all yellow ochreous; legs ochreous yellow, the foretarsi faintly grey-spotted.

Expanse of wings: 35 mm.

1 & from Sapucay, near Villa Rica, Paraguay, July 1901 (Foster).

#### 114. Hammaptera subalbata spec. nov.

Forewing: flesh-coloured brown, tinged with olive and sometimes darkened with fuscous suffusion; middle third of wing occupied by a dark blackish brown fascia crossed by several waved lines and containing the obscure cell-spot; this fascia has its inner edge formed of three curves concave basewards, the middle one large, stretching from fold to fold; all the lines basewards parallel to it—viz., the edges of a curved dark band and the lines in the pale bands on each side of it; the basal patch quite small, with three dark lines: the bands preceding and following central fascia more tinged with green; submarginal line close to margin, formed by the interrupted pale ends of the usual lumules, preceded by three waved dark lumulate lines; pairs of semiconfluent black dots along margin at the vein-ends; fringe concolorous with dark mottlings.

Hindwing: smoky brown-black; the fringe the same.

Underside of forewing smoky blackish, the basal two-fifths whitish; a pale bent band beyond central fascia and pale spots at apex and below vein 4. Hindwings bluish white, with a black blotch from apex to vein 4, a blackish smear at anal angle, and blackish fringe.

Head and thorax pinkish brown; palpi externally, tips of patagia, and metathoracic tufts dark; abdomen brown with black segmental rings, sometimes confinent. Underside of abdomen and legs ochreous.

Expanse of wings: 36 mm.

2 dd from Charaplaya, Bolivia, 1300 m., June 1901 (Simons).

Easily distinguished by the remarkable white underside of wings, excessively like that of *Erebochlora sublactea* Warr.

### 115. Hydriomena ochreiplaga spec. nov.

Forewing: dull olive; the rows of spots dark olive-fuscous; all the spots finely but roughly edged with pale red-speckled ochreous, whereby the whole wing assumes a slightly reddish tint. The rows of spots are six in number: the first basal, hardly interrupted; second, antemedian, of three spots, a large double one in cell and beneath it, and irregular truncated ones above costal and below submedian vein respectively; third median, double towards costa, consisting of two irregularly shaped costal spots, pointed towards each other, a small blotch in cell, and a large elongated blotch beyond cell, the latter connected below cell with the outer of two curved and angled blotches in submedian interval, which unite to form a square blotch on inner margin; fourth postmedian, slightly curved and waved, the spots lunate and coalescent; fifth submarginal, of rounded and irregular spots, partially contiguous, the two beyond cell being smaller, those above and below them largest; sixth marginal, formed of more or less diamond-shaped blotches touching dark marks at the vein-ends, and enclosing pale flattened ovals before the fringe, which is

olive; a pale yellowish ochreous elongated blotch occupies two-thirds of the lower half of cell.

Hindwing: glossy grey, with traces of a darker postmedian shade and darker

margin; fringe grey.

Underside of forewing fuscous-olive, with the costal region broadly reddish and the costal marks of upperside reproduced, the series of spots being all faintly discernible. Hindwing dull reddish, speckled with olive fuscous, with diffuse central shade, distinct postmedian lumulate line, and outer margin broadly fuscous.

Abdomen concolorous with hindwing; thorax, shoulders, face, and terminal segment of pulpi reddish and pale; vertex, collar, and patagia dark olive, the same colour as the spots; front of forelegs red.

Expanse of wings: 44 mm.

1 3 from Popavan, Colombia (Lehmann).

### Hypolepis gen. nov.

An offshoot of *Psaliodes*. The abdomen of the \$\mathcal{C}\$ beneath is furnished with a double row of large spatulate scales meeting keelwise along the middle, from between which arises a long double curved pencil of hairs, or thick tufts of hair. The hindwing bears a partially scaled furrow along the submedian fold. Lastly the neuration differs: the discocellular of the hindwing is not biangulate, but vertical above and oblique below, the radial rising from above the centre. The antennae are thickened, subservate, the teeth clavate.

Type: Hypolepis strigosa spec. nov.

# 116. Hypolepis albistriga spec. nov.

Forewing: dark brown; the lines and all the veins (except vein 5) whitish ochreons; basal line vertical, below middle curved outwards; inner line straight and broad, from middle of costa to just before middle of inner margin, closely preceded from subcostal vein by a narrower slightly waved line; outer line double, at three-fourths, onteurved between vein 7 and the submedian fold, both arms somewhat crinkled; submarginal line irregularly zigzag, forked below apex, all but touching outer line on vein 5; a marginal line of whitish scales; fringe dark brown, chequered with whitish between the veins.

Hindwing: whitish oehreous, darker along hindmargin; fringe ochreous, chequered with black beyond veins, and with a dark fine line along base.

Underside pale blurred grey; a broad submarginal streak and veins 6 and 7 narrowly orange-red; apical area dusted with pale ochreous; inner and outer lines pale, the latter dark-edged towards costa; fringe ochreous with velvety black mottlings beyond veins. Hindwing whitish, mottled with brown; a brown postmedian waved line, costal and subcostal veins orange; fringe yellow, with black line along base.

Face brown; vertex ochreous; shoulders and patagia brown with ochreous tips; abdomen ochreous, brown along dorsum, with the segmental divisions ochreous; legs brown, speckled with ochreous; scales beneath abdomen and the tufts ochreous; (palpi broken).

Expanse of wings: 26 mm.

l & from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet senson (Ockenden).

### 117. Hypolepis castanea spec. nov.

Forewing: dark chestnut-brown; the basal patch, central fascia, and marginal area darker, more fuscous-tinged; all these darker areas edged by white lines, traversed each by a black thread; edge of basal patch curved and waved; inner edge of central fascia waved; outer line lumilate-dentate, the teeth pointing basewards, indented beyond cell and on submedian fold; a dark linear cell-mark; submarginal line, sometimes obscure, forming the limit of a large triangular dark patch between apex and vein 4 and lumilate-dentate thence to anal angle; fringe chequered, dark and light brown.

Hindwing: dark fuscous brown; the cell-spot dark; fringe pale, with dark

spots.

Underside of forewing dull brownish grey; costal edge dotted with dark; an orange subcostal streak; cell-spot dark; markings partly showing through. Hindwing paler, with brownish striae; a dark cell-spot, and traces of a dark postmedian line.

Head, thorax, and abdomen chestnut-brown; antennae dark fuscous; abdominal

scales and tufts ochreous.

Expanse of wings: 30 mm.

3 & d, 4 ♀♀, from Santo Domingo, Carabaya, S.E. Peru, November, December 1901 (Ockenden).

### 118. Hypolepis conspersata spec. nov.

Forewing: dull brown, with darker, more fuscous, markings; basal patch small, fuscous, edged by a white, black-bordered, nearly vertical line; central fascia fuscous, edged on each side by a white lunular line traversed by a black one, the outer edge more or less parallel to hindmargin and indented beyond cell; cell-spot obscure, blackish; space between basal patch and central fascia and that beyond outer band occupied by brown shades; a black sharply lunulate submarginal line, the lunules above vein 4 partially filled in with black; an interrupted black marginal line; fringe yellowish, mottled with dark; the wing, and especially the marginal third, is thickly covered with minute pale and dark striae.

Hindwing: dull brown, paler towards base, with obscurely darker postmedian and submarginal lines from inner margin; cell-spot dark; fringe pale yellow,

with dark mottling.

Underside of forewing cinereous, dappled with yellowish; an orange subcostal streak; cell-spot dark, followed by a pale patch; hindmargin above middle darker. Hindwing yellowish, striated with brown, with two slightly marked lines; cell-spot linear, conspicuous.

Head, thorax, and abdomen fuscous brown.

Expanse of wings: 29 mm.

1 9 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., May 1902, dry season (Ockenden).

Very near to H. castanea and sordida, but apparently distinct.

# 119. Hypolepis plumbescens spec. nov.

Forewing: pale leaden grey, glossy; the basal patch, central fascia, and marginal area somewhat darker, decidedly darker along the edges, where they are mixed with brown, and all edged with a paler line; basal patch small, its

edge wavy, vertical; inner edge of central fascia, sinuous, vertical, at one-third; outer edge from two-thirds of costa to three-tifths of inner margin, projecting at veins 6 and 4, insinuate between and on submedian fold; marginal area above vein 4 much darker, forming a large triangular projection beyond cell and a smaller rounded one above vein 6; antemarginal space pale yellow with a darker yellow shade down it; three pale grey streaks on costa before apex; fringe yellow and grey; costa finely dotted with yellow.

Hindwing: pale yellowish, tinged with pale grey, except along a broad

postmedian curved band; cell-spot faint; fringe yellowish.

Underside pale leaden grey; costa dotted with yellow; an orange subcostal streak from base to apex; the apical veins orange; an oblique pale straw-coloured outer band; cell-spot black; fringe yellow, dotted with grey. Hindwing whitish, striated with grey; a blackish cell-spot and broken postmedian line, followed by a broad yellowish band; veins and fringe yellow.

Head, thorax, and abdomen yellowish; face brownish grey; tibiae and tarsi of fore and middle legs brown-speckled.

Expanse of wings: 3 22 mm.; \$ 26 mm.

1 3, 3, 9, from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., January 1902, wet season (Ockenden).

### 120. Hypolepis prunicolor spec. nov.

Forewing: dark violet-grey, the markings deep purple-brown, narrowly and obscurely edged with golden yellow scales; basal patch quite small, purple-brown; followed by a broad band of the ground colonr, the centre of which is occupied by a dark band marked by a deep blotch on costa and inner margin but interrupted in middle; all these dark markings edged with deep yellow scales; central fascia with inner edge straight and oblique from just before middle of costa to before middle of inner margin, its onter edge diffuse, projecting on vein 6 and at middle, from two-thirds of costa to just beyond middle of inner margin, where the fascia is narrow: the inner half of the fascia only purple-brown; beyond the second band of ground colour the outer line is waved and partially lumulate; submarginal line lumulate, the lumules filled up with purple-brown, that beyond cell large and coalescing with the lumule of outer line; fringe yellow, with purple-brown mottling beyond veins.

Hindwing: wholly dark brownish fuscous.

Underside of forewing purplish grey, the costa speckled with deep yellow; a dull orange subcostal streak. Hindwing yellowish, with long dull purplish grey striae; a postmedian band and hindmarginal border purplish grey; cell-spot linear, velvety black.

Head, thorax, and abdomen purplish brown; palpi deep dull yellow; abdomen beneath and legs dull yellow; foretibiae and tarsi mottled purplish and yellow.

Expanse of wings: 23 mm.

1 & from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

# 121. Hypolepis sordida spec. nov.

This species is very near to *II. castanea* Warr., but differs in the following points. The red-brown tinge of *castanea* is replaced by dark fuscous; the inner edge of central fascia is less acutely angled at median, the upper half being more

vertical; the outer edge of central fascia is nearer the hindmargin, the double white line following it plainer, more evenly curved, not so sinuous; the triangular dark subapical blotch larger, its apex reaching outer line. These differences appear to be constant in the two forms. The hindwing of the 3 has a similar hyaline space near base below submedian fold to that shown in custanea.

1 &, 2 & from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., January 1902, wet season (Ockenden); of the same size as *castanea* and taken at the same time and place.

### 122. Hypolepis strigosa spee. nov.

Forewing: velvety brown; the costa dotted with orange, the veins marked with dull orange, vein 4 with bright orange, with a short oblique white dash from its base into the cell; basal and inner lines straight, double, pale grey, with a dark central line, meeting on inner margin and forming a rough V; outer line double, from three-fourths of costa, slightly bulged beyond cell, then waved inward to two-thirds of inner margin; submarginal line also double, its arms rising, one before, the other at the apex, coalescing with each other and touching the outer line beyond cell, then running out, and forming a sharp tooth on hind-margin at vein 4, thence lumulate and sharply dentate to anal angle; fringe black-brown, with orange spots at base at the vein-ends, and also mottled with orange.

Hindwing: black-brown, with a deep black cell-spot; fringe mottled, black and dull yellow.

Underside of forewing dull blurred grey; a broad orange snbcostal streak, and the veins towards margin irregularly orange; cell-spot and two subcostal marks towards hindmargin black. Hindwing with the costal and subcostal veins orange, the disc sprinkled with white scales; cell-spot, a waved post-median line, and indistinct submarginal line black; fringe of both wings mottled, black and orange.

Head, thorax, and abdomen dark brown-black; palpi internally yellow; antennae yellow, spotted with black; legs fuscous and orange; spatulate scales of abdomen beneath fuscous and dull yellow, the tufts of hair black.

Expanse of wings: 28 mm.

1 &, 3 = 9 \$, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

The ?? are slightly paler, with the veins less distinctly marked.

# 123. Lampropteryx trilineata spec. nov.

Forewing: ashy grey, with a slight slate-coloured tinge; a small dark basal patch; central third of wing occupied by a slaty grey fascia, edged by thick wavy black lines, and traversed at middle by another similar, all three swollen on costa and thicker above middle, the outer one only slightly prominent at vein 4; followed by a pale band with central grey line; the marginal area brownish grey with a fine pale waved submarginal line, preceded on costa by a dark blotch; a distinct marginal black line, interrupted at the veins; fringe rufons grey, with faint mottlings; cell-spot small, black, on median line.

Hindwing: dull grey, with the lines of forewing reproduced, but very faint. Underside paler grey; forewing with four black costal spots, one near base,

and one at the commencement of each of the lines, except the first of the fascia: cell-spots, outer, and submarginal lines marked in both wings.

Head, thorax, and abdomen grey.

Expanse of wings: 35 mm.

1 & from South Park, Colorado, August 1901 (Oslar).

A very well marked insect, but I cannot find any description of it; it may, however, be an extreme individual of the N. American form of abrasaria II. S., described by Packard as Cidaria nigrofasciata.

### 124. Oligopleura biplagiata spec. nov.

Nearest to O. anhaeata Feld. and its aberration dicersicolor Warr., which I am now inclined to regard as itself a distinct species, inasmuch as the numerous examples which I have seen since the original description are all constant, and show no evidence of intermediate variation. In diversicolor the olive-greenish ground colour is divided at the middle of the central fascia by a broad ochreons band running through from costa to inner margin. In the present species the ground colour is olive-green as in anlaeata, and the outer markings agree with that species; but there are two pale ochreons patches, one occupying the basal area, the other on inner margin just before middle, and ending at the median vein; between these two patches is a fascia of five dark lines more or less filled up with olive-green; the outer three of these lines are oblique and straight, running through from costa to inner margin; the inner two are curved outwards slightly and interrupted above the median by an extension of the pale basal patch along the costa; there is also a small pale space in lower half of cell before the discal spot. The rest as in anlaeata.

Expanse of wings: 35 mm.

1 9 from Marcapata, E. Peru, 4500 ft.

# Paromala gen. nov.

Forewing: triangular; costa nearly straight; apex acute; hindmargin obliquely curved.

Hindwing: elongate, as long as forewing; the apex extending well beyond the anal angle of forewing; hindmargin curved.

Forehead produced below and scaled; palpi rough-haired, long, porrect decumbent; tongue and frenulum present; antennae (?) filiform.

Neuration: forewing, cell half as long as wing; discocellular oblique below; first median nervule at four-fifths, second close before third; radials normal; 7, 8, 9 stalked, 10 anastomosing with 11 and again with 8, 9, forming a double arcole, which is clongate, both 10 and 11 rising far back: hindwing, costal anastomosing with subcostal to near end of cell; 6 and 7 long stalked; discocellular biangulate, the radial from the lower, ontward angle.

The disproportionate size of the hindwing will sufficiently characterise the genus.

Type: Paromala elongata spec. nov.

# 125. Paromala elongata spec. nov.

Forewing: whitish grey, very thickly but finely speckled with dark atoms; no distinct markings; but the antemedian and postmedian lines are indicated by dark dots on veins, the former curved at one-third, the latter oblique, parallel

to hindmargin, at two-thirds; fringe concolorous, beyond a hardly darker marginal line; cell-spot small.

Hindwing: whiter, with hardly any dusting; a postmedian line of dots.

Underside dark grey, speckled with fuscous; cell-spots and outer lines marked, the latter very distinct in the hindwing.

Head, thorax, and abdomen pale grey.

Expanse of wings: 24 mm.

1 9 from Ecnador.

### 126. Perizoma amplata spec. nov.

Forewing: dull wood-brown, in places fuscous; the lines paler, slender; basal patch small, fuscous, edged by a curved pale line; a similarly curved pale line from one-fourth of costa to near middle of inner margin forms the inner edge of the central area; onter line from two-thirds of costa, outcurved to vein 4, then incurved, dentate inwards on the veins, and vertical from vein 2 to inner margin shortly before anal angle; the inner half of the median area, broadly above middle and narrowly below, fuscous edged with darker; the outer line is traversed by a darker thread; marginal area fuscous brown, from apex to outer line at vein 6 black, containing a submarginal line marked by black wedge-shaped marks tipped with white, and joined by fine black dashes with the black marginal line, which is interrupted by pale spots at the vein-ends; fringe with the inner half dark brown, the outer paler; cell-spot small, black.

Hindwing: dull smoky brown, with a darker marginal border; fringe pale dotted with darker.

Underside of forewing dull brown, with cell-spot, outer line, and a narrow black blotch on costa before apex; a submarginal row of white dots. Hindwing speckled with darker, with cell-spot, dark waved postmedian line, and submarginal row of white spots; patches of black scales along the submedian fold; the inner margin itself whitish, with its fringe pale brown.

Head, thorax, and abdomen dark fuscous brown, speckled with paler; the segmental rings of abdomen pale; legs blackish.

Expanse of wings: 26 mm.

6 & & , 2 & & , from Santo Domingo, Carabaya, S.E. Peru, 6000 feet, November, December 1901, January 1902, wet season (Ockenden).

## 127. Perizoma aureoviridis spec. nov.

Forewing: yellowish green, shading into slate-colour towards hindmargin; the markings olive-fuscons; a curved band close to base, narrowed to a point on inner margin; second band sinuous, at one-third, forming the inner edge of the central fascia; third at two-thirds, bidentate outwards between 6 and 7, the teeth small, and again between 2 and 4, the teeth broad; this outer band mixed with brownish and filac grey, and containing two inner lines, the innermost distinct, dark olive; it is followed by a pale green band with two brownish lines through it, marked on costa close to central fascia with pale yellow; submarginal line regularly lunulate, pale yellowish green, the lunules partially filled up with greenish, and followed by paler green streaks to hindmargin; the lunule between veins 3 and 4 ferruginous; pairs of dark green marginal dashes at the vein-ends; fringe pale greenish, with two dark green lines, and mottled with darker beyond veins; cell-spot minute; space between basal patch and central fascia with its

inner half lilac-grey, the outer half of the pale-green ground colour with two darker lines.

Hindwing: greenish cream-colour, bluish green along hindmargin: traces of two or three curved lines only distinct on inner margin: fringe greenish white.

Underside of forewing mealy green, with the lines of the outer band marked; marginal area paler green; fringe green with dark mottlings; of hindwing yellowish green, rather glossy; the cell-spot and outer line darker.

Head, palpi, and vertex pale mealy green: thorax mixed with darker green: abdomen greyish ochrous with traces of pairs of dark spots along dorsum; fore and middle legs very dark green, with the joints pale: hindlegs paler green.

Expanse of wings: 32-34 mm.

2 of from Marcapata, E. Peru, 10,800 ft. (Ockenden).

A remarkably coloured insect when fresh.

#### 128. Perizoma mirifica spec. nov.

Forewing: pearl-grey; basal patch and central fascia dark reddish fuscous; the space between dark grey, crossed by lines of orange, grey, and red-brown; the inner edge of the central fascia waved and curved outwards, the outer edge from a little beyond middle of costa, slightly bisinuate in cell and on submedian fold, and projecting between; towards the outer edge the fascia is deepest, towards the inner edge it is varied with orange scales; beyond it is a pale-grey belt, containing three darker grey lines, the first narrow, the second broader and irregular, the outermost lumulate; then come three dentate lines, gilded yellow, separate above but coalescing towards inner margin, the last being the submarginal line, with its teeth in the upper half of wing filled in with blackish; the costal region from outer line to apex gilded yellow; marginal area dark grey; fringe dark grey, with some gilded yellow scales along base and obscure dark marginal spots.

Hindwing: dark grey; fringe and marginal spots as in forewing.

Underside of forewing dark grey to outer line, then paler, darkening again towards hindmargin; costal area broadly brown with yellow freckling; a dark cell-spot; a large vinous-red subapical blotch. Hindwing vinous-red, speckled with grey and yellow, greyer beyond median line; cell-spot dark.

Palpi and vertex fuscous; face whitish grey; thorax, patagia, and basal segments of abdomen red-brown, varied with orange; rest of abdomen grey.

Expanse of wings: 30 mm.

1 8 from Santo Domingo, Carabaya, S.E. Pern, 6000 feet, November 1901, wet season (Ockenden).

An unusually marked species.

# Phlebosphales gen. nov.

Apparently a development of Inticlea.

Forewing: elongate; costa slightly curved; apex prominent; hindmargin obliquely curved: inner margin very convex, almost lobed in the centre.

Hindwing: with both angles and the hindmargin well rounded.

Palpi long, porrect, drooping: laterally flattened, rough-haired beneath, resembling those of A. arcillata Dogn.; antennae ligulate, lamellate: tongue and fremulum present; anal tufts of the & largely developed.

Neuration: forewing, cell not half as long as wing below, only a quarter as long above, the discocellular therefore long and oblique; first median nervule at two-thirds, second and third from the lower angle; lower radial from the middle of discocellular, upper from the bent-down end of subcostal; the stalk of veins 10 and 11 rising near base, that of 7, 8, 9 shortly beyond, and slightly curved upwards, the subcostal being then deflexed; between 6 and the stalk of 7, 8, 9, the wing membrane is puckered and contorted, mostly scaleless, vein 6 partially crossing it; 10 anastomoses with 8, 9, forming a single arcole: hindwing normal; discocellular angulate, the radial from the lower ontward angulation.

Type: Phlebosphales engelkei spec. nov.

### 129. Phlebosphales engelkei spec. nov.

Forewing: whitish, overlaid with grey and fuseons scales; the course of the subcostal vein, the edge of the inner margin, and the submarginal line tinged with pale brown; above the subcostal vein the dark lines and paler intervals are clearly marked along the costa; below it across the wing the markings are indistinct; there appear to be two narrow dark lines near base, then a dark grey band containing the blackish cell-mark; beyond this, at the middle of wing another single dark line, followed by a dark band, narrow at costa and protruding in middle of wing towards hindmargin; submarginal line close to margin, irregularly dentate, crossing a whitish patch below vein 4; a marginal line of black dashes, with white dots at the vein-ends; fringe dark brown. The scaling generally is glossy.

Hindwirg: dull slaty grey, with dark cell-spot, and marginal spots as in

forewing.

Underside dull slaty grey, paler in hindwing.

Head and thorax damaged, abdomen cinereons.

Expanse of wings: 28 mm.

1 & from Onaca, Sta. Marta, June to August (Engelke).

The condition of the unique specimen prevents a more accurate description.

# 130. Psaliodes acutangula spee. nov.

Forewing: plum-colour; the lines yellow ochreous, sharp and straight; first close to base, outwardly edged with dark vinous; second from one-third of costa te two-fifths of inner margin, nearly straight, and oblique inwards; onter line from three-fourths of costa, oblique inwards to vein 6, then running outwards for the same distance along vein 6, very acutely angled towards apex, and oblique inwards to four-titths of inner margin; the central fascia along each of its edges is broadly vinous; cell-spot dark; the marginal veins are darker, very minutely dotted with pale; fringe plum-colour, with yellow dots at the vein-ends at base; costa finely dotted with yellowish.

Hindwing: pinky yellow, becoming plum-colour towards hindmargin; a broad dark-edged yellow postmedian band, angled at vein 6 and thrown back to costa as a large lunule; cell-spot linear, blackish; fringe dark grev.

Underside reddish, the lines all deep yellow.

Head, thorax, and basal segments of abdomen plum-colour; rest of abdomen cinereous.

Expanse of wings: 22 mm.

1 3, 2 \$ \$, from Santo Domingo, Carabaya, S.E. Peru, 6000 feet, November. December 1901, wet season (Ockenden).

This species is very near Alydda lignosata Wlk. which is a true Psaliodes; as is likewise Snellen's species endotrichiata, wrongly referred by him to Guenée's Ennomid genus Cyclomia; and the same applies to Dognin's Cyclomia magnipalpata.

#### 131. Psaliodes albidulata spec. nov.

Forewing: cream-white; the markings olive fuscous, all more or less broken up by the paler ground colour, but darker along costa; basal patch edged by a thick line oblique inwards; the pale band between it and central fascia occupied by an inwardly oblique dark band, the edges remaining pale; central fascia narrow, oblique inwards to before middle of inner margin, its outer edge insimuate beyond cell and on submedian fold, projecting between; beyond the pale band following it is a double line, of which the outer arm is thick and lumulate; submarginal line broad, insimuate beyond cell, where it almost interrupts the lumulate shade; marginal area consisting of large lumules, that beyond cell twice as large as the others; a fine dark marginal line; fringe cream-colour mottled with fuscous; cell-spot small in the central fascia.

Hindwing: tinged with ochrous grey, with a central, double submarginal, and a marginal band dark grey; marginal line dark; fringe ochrous.

Underside duller, with similar markings; forewing with a deep yellow sub-costal streak: veins 6, 7 and the stalk of 8, 9, 10 also yellow. Hindwing with the veins yellow; the ground colour pale ochreons with fuscous striae and speckles; a paler band between a dark postmedian and submarginal line; cell-spots distinct in both wings.

Head, thorax, and abdomen ochreous, tinged with fuscous; patagia and shoulders fuscous, with the tips ochreous; tarsi externally spotted fuscous and ochreous.

Expanse of wings: 30 mm.

2 dd from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901—January 1902, wet season (Ockenden).

## 132. Psaliodes aurativena spec. nov.

Foreving: with base, central fascia, and marginal blotches dark purplish brown; the median vein and its branches, the submedian, and veins 5, 6, 7 broadly yellow; intervals white, tinged with yellow, all the paler areas thickly freckled with brown; edge of basal patch sinnons, followed by a sinnons white line; central fascia with both edges lumulate between veins, the outer acutely so, preceded by a lumulate, white, brown-edged line, and followed by two acutely dentate, brown-edged white lines; the band between basal area and central fascia yellowish, marked with fuscous striae on costa at its middle; submarginal line white, irregular and broken up; an irregularly lobed triangular purple-brown blotch from apex to vein 4, and a large blotch at anal angle; the submarginal line is preceded by an indistinct series of brown wedge-shaped marks; the central fascia is interrupted by the yellow median vein and marked with white above it: fringe brown, with yellow dashes between the veins.

Hindwing: dark grey, paler towards base, with a dark cell-spot; fringe yellow, mottled with black.

Underside of forewing grey, browner towards apex and speckled with yellow; costal area broadly yellow, the costal edge brown-spotted; all the veins yellowish. Hindwing white, striated with brown; all the veins deep yellow; the cell-spot dark brown.

Face and palpi olive-fuscous; vertex, thorax, edges of shoulders and patagia, and dorsal segments of abdomen yellowish; base of shoulders and patagia fuscous.

Expanse of wings: 30 mm.

4 9 9 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

These are probably Hypolepis, but in the absence of a  $\delta$  I leave them in Psaliodes for the present.

#### 133. Psaliodes citrinata spec. nov.

Forewing: straw-colour; the markings dark brownish fuscous; the lines white and pale yellow; the veins yellowish; basal patch edged by a broadish black-brown band; central fascia narrow, sinuous, from middle of costa to before middle of inner margin, both edges lumulate, the inner irregular, bulged towards base below the median vein; pale space preceding it correspondingly enlarged above the median, its edges white, the centre yellow, limited by pale-brown scales and with some central fuscous scales on costa; onter edge followed by a white and then a yellow line of equal width separated by a pale-brown line, the yellow succeeded by a fuscous shade forming lumules or wedges between the veins edged by the whitish submarginal line; a pale oblique space from apex; a large fuscons-brown triangular blotch from apex to vein 4, and a double lumulate brown blotch at anal angle, the lumule between 3 and 4 remaining pale with dark outline; marginal line brown; fringe yellow, mottled with dark brown; in the fuscous central fascia, lying on the median vein, is an elongate yellowish-white blotch below the obscure dark cell-spot.

Hindwing: grey-brown, with brown cell-spot and an indistinct brown median line; the marginal border darker: fringe pale with dark brown mottlings.

Underside of forewing dull grey, the costal area yellowish, with darker speckling; a yellowish outer line and pale streak from apex; cell-spot black; fringe yellow, mottled with brown. Hindwing, yellowish straw-colour, sparsely striated with brown; a brown cell-spot and three brown median spots indicating a central line.

Head, thorax, and abdomen yellowish; base of shoulders and patagia brownish. Expanse of wings: 26 mm.

1 % from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).

Distinguished by the sinuous central fascia with its pale spot, and by the lemon-yellow bands.

## 134. Psaliodes clathrata spec. nov.

Forewing: sating white; a costal streak, the veins, and fringes yellow; the costal edge minutely speckled with brown; a line of brown speckles along subcostal vein to beyond middle, sometimes slight; the lines red-brown, the inner and antemedian lines vertical, at one-fifth and two-fifths respectively; the inner fine, with a large tooth outwards along submedian fold, the second much thicker, with a

brown blotch externally on submedian fold; median line double, sinnate, from two-thirds of costa to middle of inner margin; the inner arm red-brown, thickened in cell and on submedian fold, connected with antemedian line by a line along the cell-fold, the outer arm paler and finer, distinctly and regularly lumulate-dentate; exterior line parallel to hindmargin, crenulate, also double, the inner arm darker: submarginal line formed by a series of brown lumulate marks, that beyond cell large, reaching exterior line and connected with median line by a red-brown streak along vein 5; slight lines of brown dots along hindmargin, and sometimes along the yellow veins; fringe finely intersected by brown beyond veins.

Hindwing: with very faint cell-spot, middle and outer curved lines, and slight brown marginal line before the yellow fringes.

Underside of forewing yellow, with the markings faint and blurred; of hindwing white, with the markings brown and clear.

Head, thorax, and abdomen yellowish; the head parts, shoulders, and patagia somewhat deeper.

Expanse of wings: 28-30 mm.

4 9 9 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., January 1902, wet season (Ockenden).

#### 135. Psaliodes fractilinea spec. nov.

Forewing: violet-grey-brown; the lines black-brown; veins towards hind-margin dotted with dark and light scales; costal area in apical half of wing broadly whitish; first line oblique inwards, from one-fourth of costa to one-sixth of inner margin, the included basal area wholly violet-grey; second line, parallel to first, from middle of costa to two-fifths of inner margin, forming three slight curves concave outwards, interrupted on subcostal vein, the violet-grey space between the lines becoming whitish along first line, with a fine line from inner margin; space immediately beyond second line below subcostal vein broadly white, containing a fine dark wavy line; outer line from nearly three-fourths of costa, oblique outwards at first, then nearly vertical, and again from vein 5 to outer margin below vein 4 oblique, this lower portion followed by a dead-white streak, containing two fine dark lines; the whole of the marginal half violet-brown, deepening towards margin, containing two horizontal velvety black streaks, one wedge-shaped, from end of cell to outer line between veins 4 and 5, the other above submedian fold; fringe brown, speckled with white in places, wholly white at vein 4.

Hindwing: dingy white, with slight cell-spot and traces of the commencement of dark postmedian and submarginal lines on inner margin; fringe concolorous, with dark mottlings at the ends of veins.

Underside of forewing dull grey, with a slight violet tinge; two broad oblique dark shades near base; a dark waved postmedian line, vanishing below middle; costal edge dotted black and white; veins towards apex the same; fringe blackbrown, mottled with white between veins above vein 3. Hindwing paler, faintly freekled; cell-spot, dentate postmedian line, and base of fringe black.

Palpi very long, white, outwardly towards base sprinkled with fuscous; face white, varied with blackish; collar white, tipped with dark; shoulders and patagia white with brown lateral patches; thorax and basal segment of abdomen white, divided by a black ring; rest of abdomen violet-grey; anal hairs ochreous; pectus and all the femora yellow; rest of legs black, thickly speckled with ochreous.

Expanse of wings: 30 mm.

1 &, 1 \, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November, December 1901, wet season (Ockenden).

This species stands quite by itself.

#### 136. Psaliodes ignivenata spec. nov.

Forewing: dark brown; the lines white; the subcostal vein broadly, the median and all the veins in the marginal half of wing fiery red; the costal edge brown, with pale dots showing the commencement of the lines; basal line marked only by a spot at base of cell and a fine line below the median vein; inner line broad, obliquely sinuous from apper margin of cell, its upper part with some grey scales on it; outer line, narrower, from costa at nearly three-fourths, strongly ontcurved between veins 7 and 3, insimuate between 3 and 2, and again outeurved in submedian interval; an oblique white dash on the lower arm of discocellular; the outer line is followed by two fine lumulate lines; submarginal line lumulate, preceded and followed by dark brown shading; an oblique white streak from apex and some white spots between veins just before the margin, those between 1 and 2 and 3 and 4 larger; all the outer lines are interrupted by the red veins; fringe glossy whitish, with black chequerings at the veins.

Hindwing: dull dark grey, with a dark cell-spot, a dark median line outcurved at middle, and dark marginal shade; fringe as in forewing.

Underside of forewing blurred grey; a broad subcostal orange-red streak, and the apical veins orange; the cell-mark and the outer lines beneath the costa white. Hindwing white, striated with grey; the base of costa orange; cell-spot, a curved median line, and macular submarginal shade darker.

Palpi, head, thorax, and abdomen above fiery red, the thorax varied with dark; segmental rings of abdomen whitish.

Expanse of wings: 26 mm.

1 &, 1 ♀, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).

### 137. Psaliodes inferna spec. nov.

Forewing: dark brown-black; costa minutely dotted with white; the lines white; first narrow, obliquely curved, close to base; second, much broader, yellowish white, from below one-third of costa to one-third of inner margin, edged ontwardly with black, and emitting a pale tooth inwardly along the median vein towards first line; outer line slender, from two-thirds of costa, slightly oblique inwards to vein 6, then outwards to vein 4, below which it is obsolete; a few pale submarginal scales between veins 3 and 4; fringe concolorous, with some pale scales along base, and a white patch between 3 and 4.

Hindwing: entirely smoky brown-black; fringe chequered with darker.

Underside of forewing lavender-grey; costa speckled black and white; a bright orange subcostal streak; second and onter line both showing whitish; a submarginal whitish-edged black blotch from the costa, approaching outer line at vein 4; fringe dark grey, with a white blotch between 3 and 4. Hindwing, whitish, freckled with grey; a large brown cell-spot, a brown blotch below it on submedian fold, and a thick brown wavy postmedian line; fringe chequered, dark and light.

Head, thorax, and abdomen brown, varied with pale scales.

Expanse of wings: 17 mm.

1 \( \text{? from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).} \)

### 138. Psaliodes miniata spec. nov. and ab. fuscata nov. and pallida nov.

Forewing: with the base and central fascia coppery brown; a broad subcostal streak bright coppery red; the costal edge dotted with black and ochrous; basal patch edged by a straight dark line, mixed with a few white scales; band between base and central fascia bright coppery red with its centre fuscous; central fascia edged with white black-edged lunules; its outer edge indented below costa, angled on vein 6, and forming a beak-like projection on vein 4, then concave to inner margin, followed by a broadish coppery-red line; submarginal line very obscure, marked only on costa and above anal angle; cell-spot blackish, indistinct; marginal line black; fringe white, chequered with black.

Hindwing: dull coppery red, with a broad fuscous median band, edged externally with whitish; a dark cell-spot; marginal area darker; fringe as in forewing.

Underside of both wings coppery red; markings of forewing distinct towards hindmargin. Hindwing with black cell-spot and distinct black-brown median shade edged with white.

Head and palpi ochreous; thorax and patagia coppery; abdomen dark cinereous,

Expanse of wings: 3, 17 mm.; 2, 24 mm.

1 &, 1 &, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November, December 1901, wet season (Ockenden).

In the  $\mathcal{S}$ , which is considerably smaller than the  $\mathcal{S}$ , the paler markings are attenuated, the upper half of the onter edge of central fascia is more vertical, and the projection at middle less prominent. In another  $\mathcal{S}$ , however, which must be referred to the same species, the red markings are inconspicuous, and the white markings even more prominent than in the typical  $\mathcal{S}$ ; in this case the edging of the outer half of central fascia below costa consists of two vertical white streaks, one obliquely below the other, and the hindwing and underside are almost wholly dark fuscous. For this form I propose the name fuscata.

A second ? differs so much that it may be another species, though for the present I shall separate it only as ab. pallida. In this the red is deeper and the fuscous markings blacker, the white markings clearer and more defined; the lower half of central fascia also much narrower; the fringe is white, with black base, but without dark mottlings. The hindwing is grey, with darker grey central line and marginal border. Beneath, the forewing is dull dark grey, with the white edgings showing, and only a faint tinge of reddish; the hindwing much speckled with brownish red and white, and all the markings hidden.

### 139. Psaliodes nexilinea spec. nov.

Forewing: straw-colour; the median vein and its branches and the submedian pale ferruginous; the lines darker ferruginous; a fine slightly curved line near base; an oblique funnel-shaped narrow fascia at middle, its edges and narrower part below the median darker ferruginous; a sinuous submarginal line, lunulate

below middle; a triangular ferruginous-edged patch on hindmargin from apex to vein 4, its apex connected by a ferruginous streak with the central fascia on vein 4; some faint striae above anal angle; fringe straw-colour, with sharply marked black-brown dashes at the ends of the veins.

Hindwing: straw-colour, slightly rust-coloured along hindmargin, with traces of median and postmedian lines on inner margin; fringe pale, unmottled.

Underside with the markings of forewing pale rusty; costal half of submarginal line and oblique line from apex dark brown, as are the marginal line and spots on fringe; costal edge dotted brown and yellow. Hindwing yellow with rusty striae and indications of two curved lines.

Head, thorax, and abdomen straw-colour, with faint rust-coloured scales.

Expanse of wings: 22 mm.

2 9 9 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November, December 1901, wet season (Ockenden).

#### 140. Psaliodes nictitans spec. nov.

Forewing: straw-colour, the markings fulvous; the median and its branches fulvous; costal vein orange-red; the costal edge with dark-brown striae; basal line outwardly oblique, brown, the basal area straw-colour below median, fulvous above; central fascia with inner edge concave basewards, the onter concave outwards to vein 6, there acutely angled and sinuous to inner margin, where the fascia is only half as wide as on costa; it is filled up with deep fulvous, darker at its edges, except a pale blotch at end of cell containing the distinct black cell-spot, and towards the costa it is striated with paler; a fulvous oblique streak from apex and a diffuse subapical cloud join the angle of central fascia and appear to form part of it; marginal area with a double submarginal sinnous line and a marginal shade, all fulvous; the band before central fascia is traversed by two curved fulvous streaks; fringe pale, mottled with black at the vein-ends.

Hindwing: pale straw-colour, with a postmedian fulvous line and slight cell-spot.

Underside of forewing with the subcostal and median veins and sinuous outer line orange fulvous; the transverse markings on costa and in cell olive brownish. Hindwing with orange-red central line.

Head, thorax, and abdomen straw-colour; palpi externally brownish.

Expanse of wings: 22 mm.

1 2 from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

#### 141. Psaliodes ossicolor spec. nov.

Forewing: bone-colour, the markings olive-brown or olive-fuscous; the costa fuscous for two-thirds; an olive-fuscous inwardly oblique line close to base, widened at costa; an inwardly oblique fuscous fascia from beyond middle of costa to middle of inner margin, its inner edge indented below costa, its onter bulged a middle, more or less interrupted from fold to fold by the pale ground colour; an indistinct outer line of a few striae; marginal area with two fuscous blotches; one triangular from apex to vein 4, the point of the triangle reaching submarginal line on vein 5, the other smaller at anal angle; fringe bone-colour, with fuscous mottlings.

Hindwing: with the apex and hindmargin slightly grey-tinged,

Underside of forewing dull grey-brown, the subapical area ochreous; a broad orange subcostal streak, and the upper veins yellow; fringe yellowish, with fuscous chequerings. Hindwing bone-colour, with fuscous striac along inner- and hindmargin, and a narrow central line.

Head, thorax, and abdomen bone-colour; antennae fuscous.

Expanse of wings: 23 mm.

2 33, 4 99, from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

In the paler examples the markings are pale olive-brown, and the striac more numerons.

#### 142. Psaliodes pervasata spec. nov.

Forewing: costal area vinous brown, striated with yellowish; the area between veins 2 and 3 and half of that between 3 and 4 vinous brown, the three median nervules marked with black and light dots; the markings velvety blackish; the lines bright cream-colour; a thin obscure sinuous basal line; an oblique broad cream-coloured band from below middle of costa to before middle of inner margin, with two waved dark lines down it; the space between it and basal line below the median black-brown, its outer edge also above the median, and forming an acute angle ontwards in cell, with a pale spot in cell before it; central fascia black-brown from subcostal to below vein 4 and again below vein 2, where it is much narrower; it is edged outwardly by a broad cream-colonred line, then a fine dark line, and another fine cream-colonred line; submarginal line creamcoloured, innulate, meeting an oblique pale streak from apex, which edges an irregular velvety-black triangular blotch; the submarginal line has its pale lunules filled up with black, and on vein 4 forms a beak-like projection towards hindmargin; both the central fascia and the pale lines edging it are interrupted by the vinous-brown space above vein 2; fringe mottled cream-colour and black.

Hindwing: dull grey, darker towards hindmargin, with a dark cell-spot and fine black crenulate marginal line; fringe straw-colonr, with black dashes beyond the veins.

Underside of forewing dull grey, with the pale markings showing through in places; costal area broadly yellow with grey striations; apical area darker grey with pale striae, the apical veins yellow; fringe mottled yellow and black. Hindwing white, with strong brown striations and indications of two lines; the cell-spot brown; base of costa and subcostal area beyond broadly yellow; fringe yellow, unspotted.

Face, palpi, and shoulders yellow; some dark scales between antennae; patagia fuscous and yellowish; abdomen rufous, the thorax whitish; the tarsi and spurs dotted dark and light; antennae dark, mottled with yellowish.

Expanse of wings: 32 mm.

1 ? from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

#### 143. Psaliodes picta spec. nov.

Forewing: with basal area, the central fascia, and a triangular costal blotch before apex olive-fuscous; subcostal vein finely orange-red; the central fascia forming a prominent beak at vein 4 towards hindmargin; its edges darker and mixed with orange-red, preceded and followed by broad but irregular white lumnles;

the basal area confusedly mixed with orange and white; submarginal line broken np into irregular white patches, edged with black and orange; a large dark cell-spot; fringe white, chequered with dark.

Hindwing: whitish, with the base, a central band, and the marginal border diffusely grey, the hindmargin with some orange scales; a distinct cell-spot; fringe as in forewing.

Underside of forewing with the markings reproduced, and towards the hind-margin very distinct. Hindwing white, washed with orange and striated with brown; cell-spot brown; a diffuse brown median line and finer submarginal line, both outwardly white-edged.

Head, thorax, and abdomen a mixture of ochreous, orange, and fuscous scales, the abdomen more fuscous.

Expanse of wings: 20-22 mm.

1 ♂, 3 ♀♀, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden), type.

1 &, Chulumani, Bolivia, December 1901, 2000 m. (Simons), larger and duller than the Pernyian examples.

### 144. Psaliodes planiplaga spec. nov.

Forewing: bone-colour, tinged with ochreous; the markings chocolate-brown; basal patch small, filled up with brown only above median vein, but edged by a brown line which reaches inner margin, inbent below median; central fascia with its inner edge straight and oblique, from two-fifths of costa to two-fifths of inner margin; onter edge from two-thirds of costa, parallel at first to the inner edge, then curved outwards and forming a beak on vein 4 with a deep sinus below to inner margin at three-fifths; along the costa the brown of the fascia is nearly obliterated by the ochreous-tinged ground colour; cell-spot oblique, dark brown, preceded by a whitish horizontal streak from inner edge of fascia; band before fascia tinged along its centre with ochreous; space beyond fascia traversed by two brownish lines, the outer thicker, both bent outwards below middle; a subquadrate chocolate-brown blotch below apex, and smaller dark blotches between 2 and 4 at the margin; the veins ochreous; fringe pale, chequered with brown.

Hindwing: pale, with the hindmargin ochreous, containing a paler band; fringe pale.

Underside of forewing with all markings dull grey; a broad orange subcostal streak; cell-spot and the chequering of the fringe dark brown. Hindwing pale, striated with brown, with cell-spot brown, and traces of two curved lines, marked by brown spots on costa and submedian fold.

Head, thorax, and abdomen ochreous.

Expanse of wings: 24 mm.

1 & from Costa Rica, 1500 m. (M. de Mathan).

In colour of ground and markings much resembling Ps. lisera Dogn., which was also sent from Costa Rica, but the pattern of markings entirely different.

## 145. Psaliodes semirasa spec nov.

Forewing: pale flesh-colour; costal margin brown for two-fifths; from it two brown vertical lines: the first, close to base, single; the second, from one-third, double; a small brown cell-spot: some dark scales round apex, and a

black spot before margin between veins 6 and 7; a dark marginal line below apex; fringe concolorous.

Hindwing: paler at base, flesh-coloured towards margin; on inner margin at middle the commencement of a brown central line and a dark shade at anal angle; a small dark cell-spot.

Underside faintly speckled with dark; a brown blotch at base of costa, and brown outer line from costa to cell; the cell-spot, an apical spot, and the spot above vein 6 brown. Hindwing with brown striations; a brown cell-spot, and traces of median and submarginal lines.

Head, thorax, and abdomen flesh-colour; the face and vertex marked with brown; the shoulders wholly brown.

Expanse of wings; 19 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

### 146. Psaliodes serratilinea spec. nov.

Forewing: pale brown, the markings dark brown, all distinctly edged with white: basal patch with outer edge enryed, projecting above median vein; inner edge of central fascia at two-fifths, waved and oblique, indented slightly on the folds; centre of band preceding fascia pale brown, edged with a dark-brown line before the white lines edging the basal patch and central fascia; onter edge of fascia cremulate, sinuous, followed by a broad white line divided by a brown one, projecting a sharp tooth inward on vein 7; space beyond irregular, dark brown below costa, paler brown below median, edged below costa by a fine, acutely zigzag white line; the dark marginal area broadly edged inwardly with white, the interval on margin between veins 3 and 4 pale; the veins pale yellow in marginal half; fringe mottled yellow and brown; within the inner edge of central fascia above vein 4 is a small horizontal curved white spot.

Hindwing: pale grey-brown, with traces of cell-spot and two darker curved lines beyond middle.

Underside pearl-grey, with the outer line and cell-spot darker; a broad orange subcostal streak; the apical veins orange, speckled with dark. Hindwing yellowish, striated with brown; cell-spot and two outer lines brown.

Head, thorax, and abdomen yellow and pale brown; the shoulders and patagia pale brown with yellow tips.

Expanse of wings: 25 mm.

1 % from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., December 1901, wet season (Ockenden).

# 147. Psaliodes siennata spec. nov.

Forewing: dark brown; the lines ochreous, diffuse; a sinuous line near base; an oblique fascia before middle with a brown thread through it, slightly bent outwards at middle and interrupted below median vein; an outer sinuous fascia, also interrupted below middle, and followed above median, where it is somewhat excurved, by a subquadrate pale blotch; an interrupted submarginal line, forming a short oblique streak on costa before apex, a lunule beyond the subquadrate blotch, and two or three spots above anal angle; fringe chequered, ochreous and brown.

Hindwing: snuff-coloured brown, with a slight coppery tint, darker towards hindmargin, with faint traces of a dark postmedian line and marginal band; cell-spot large and brown; fringe pale, mottled with darker.

Underside of forewing paler brown, with fine white striae; the ochreons markings yellow-tinged; an orange-red subcostal streak, and the veins towards apex orange. Hindwing ochreous, thickly striated with brown; a dark-brown cell-spot and curved postmedian line; a dull orange subcostal streak as on forewing.

Head, thorax, and abdomen brown, varied with othreous scales; the abdomen

almost wholly dark; anal tufts of the & very large, dull ochreous.

Expanse of wings: 26 mm.

3 & &, 3 & &, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November, December 1901, wet season (Ockenden).

### 148. Psaliodes subfulvescens spec. nov.

Forewing: whitish, the ground colour remaining clear only as an antemedian and a postmedian oblique band, the latter interrupted between veins 2 and 4 and above 6; the rest of the wing overlaid with dull yellowish brown, tinged towards hindmargin with purplish grey; the basal area crossed, apparently, by two darker waved lines; the central fascia narrow at inner margin, widening above vein 2, and very broad on costa; a wavy dark submarginal line, most distinct across the white band; marginal area dark, interrupted on veins 4 and 5 by a pale patch connected with the white band beyond cell; a pale patch on costa before apex; an oblique brown cell-spot on the inner edge of the central fascia; marginal line dark; fringe whitish, mottled with brown.

Hindwing: suffused and striated with violet-brown, with cell-spot and darker median line.

Underside suffused with purplish grey and irregularly striated with fulvous-brown; costa minutely dotted with whitish and fulvous; subcostal area and a costal spot before apex yellow: a tawny bluntly angled postmedian line; the dark and light markings of the upperside showing through. Hindwing whitish striated with purplish grey, and with fulvous striae at base and along costa, before postmedian line and along submarginal line; cell-spots on both wings fulvous brown.

Head, thorax, and abdomen pale fulvous and grey.

Expanse of wings: 26 mm.

1 & from Bulim, N.W. Ecuador, 160 ft., January 1901 (Flemming and Miketta).

Hindmargin of both wings crennlate. The specimen is slightly worn, but appears quite distinct.

#### 149. Psaliodes trilunata spec. nov.

Forewing: chalk-white, grey-speckled; markings dark purplish grey, all paler below middle; edges of basal patch and central fascia all curved more or less parallel to hindmargin and all edged with a white dark-edged line; centre of pale band before fascia traversed by an ochreous-grey shading: edges of central fascia both waved, and indistinctly lumnlate; outer line dark below costa only; marginal area above middle formed by three lumnles increasing in size, each with a pale and dark lumnlar base; those below middle small, obsolescent, or with merely a dark edge; fringe white beyond a dark marginal line, and

mottled with dark; the inner edge of central fascia, even above the middle, partly excavated.

Hindwing: white, with dark-grey cell-spot, postmedian and submarginal lines; a fine dark-grey marginal line; fringe white.

Underside whitish, with thick dark-grey striae between veins towards apex: these veins orange, like the broad subcostal streak; cell-spot and marginal line blackish. Hindwing white with sparser grey striae, a cell-spot, and traces of two outer lines.

Head, thorax, abdomen, and legs white, speckled with dark.

Expanse of wings: 22 mm.

1 & from Charaplaya, Bolivia, 1300 m., June 1901 (Simons).

#### 150. Psaliodes tripartita spec. nov.

Forewing: with basal area, central fascia, and marginal border purplish brown, the band preceding fascia whitish, that following it wood-brown; edge of basal patch vertical and straight at one-fourth; inner edge of central fascia parallel, onter edge from two-thirds of costa, oblique ontwards and projecting bluntly at vein 4, then waved and oblique inwards to three-fifths of inner margin; both edges finely margined with white, most marked on the outer edge beyond cell; marginal area edged by deeper lunnles below middle, above it swelling out into a large triangular blotch, the apex of which all but touches the projection of central fascia; fringe mottled dark and light; costa apparently slightly paler and mottled with dark speckles; veins paler, with dark speckles.

Hindwing: uniform dull grey-brown; fringe mottled.

Underside of forewing with the markings shining grey, the subapical blotch purplish; subcostal region broadly yellow. Hindwing whitish, with brown striations; traces of two curved outer lines; cell-spot conspicuous, black.

Face and palpi ochreous grey; shoulders and patagia dark purplish brown, tipped with pale; abdomen like hindwings.

Expanse of wings: 22-25 mm.

2 9 9, one from Caradoc, Marcapata, February 1901, 4000 ft. (Ockenden), type, the other, worn, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., January 1902, wet season (Ockenden).

### 151. Psaliodes tripita ab. corrosa nov.

It in the 33 are on the whole darker in the forewing and show this peenliarity least; in the 33 and generally veins 3 and 4 thenselves, more rarely vein 2 as well, are coloured similarly. In the 33 and 4 thenselves, more rarely vein 2 as well as a slight distance above and below them, is filled with dull white scales nearly reaching the hindwargin, obliterating all the markings, and at first giving the impression of the wings having been rubbed.

All the examples were taken between November 1901 and January 1902 in the wet season (Ockenden).

## 152. Psaliodes vinosata spec. nov.

Forewing: vinous fuscous; the lines white: basal line obscure, indistinctly double, vertical; inner line double, nearly vertical; outer line from nearly three-fourths of costa, oblique inwards and indented on vein 7, outcurved to vein 3, then lumulate inwards, and forming an acute inward angle on submedian fold, edged by a fine black line, and this again in its lower course by a second white and black line; central fascia deeper vinous; submarginal line hardly expressed; marginal line black; fringe whitish, mottled dark beyond veins.

Hindwing: dull grey, darker towards hindmargin, with a dark cell-spot, and traces of two dark lines on inner margin above anal angle; fringe as in forewing.

Underside of forewing blurred grey; an orange-red subcostal streak; a short thick dark streak from costa before apex; apical region striated with pale; marginal line and fringe as above. Hindwing white, thickly striated with grey; cell-spot large, blackish: a lunulate-dentate curved postmedian line and traces of a submarginal beyond.

Head, thorax, and abdomen vinous fuscous.

Expanse of wings: 22 m.

1 9 from Agualani, S.E. Peru, 10,000 ft., September 1901 (Ockenden).

### 153. Pterocypha abbreviata spec. nov.

Forewing: fuscous; the lines and markings blackish; basal area to one-half of wing covered with an olive-grey pile; basal patch small, edged by two dark lines; the usual central fascia placed before the middle, the lines forming its limiting bands meeting at costa to form two blackish triangular blotches; the space beyond it, between middle of wing and submarginal line, is traversed by three acutely dentate dark lines, which below the middle form dark and pale dashes on the median nervules; submarginal line irregularly waved, preceded and followed by darker tints; a short black apical streak of two lunules; marginal festoon black; fringe dark fuscous.

Hindwing: fuscous; with a blackish straight postmedian line, followed by traces of three other dark lines in the dark fuscous marginal area; fringe pale round apex.

Underside ochreous grey with dark speckling; both wings with black cell-spots and three black curved postmedian lines, the outermost thickest and irregularly crenulate; forewing with black submarginal band separated by a pale submarginal line from the black-speckled marginal area, which has no pale spaces at apex or middle; hindwing paler throughout.

Head and palpi fuscous; vertex pale olive; thorax and abdomen olive, much mixed with fuscous and black; the segments of the abdomen obscurely black-spotted.

Expanse of wings: 44 mm.

2 & d from Sapucay, near Villa Rica, Paragnay, August and September 1901 (Foster).

Distinguished by the position of the central fascia, and by the broad short forewings with rounded apex; also by the absence of the white apical spot beneath. In another example the forewings are tinged with olive-green and flesh-colour, and all the markings are clearer.

#### Rhinura gen. nov.

Forewing: very broad, triangular; costa strongly arched, but slightly inflexed before middle; hindmargin with a blunt angulation at vein 4, concave above to vein 7, which is also slightly toothed below apex.

Hindwing: with apex rounded, slight teeth at veins 6 and 4, and a short enryed tail at vein 3, thence to anal angle twice excavated.

Palpi porrect, the second segment long, rough-haired, third segment short, pointed, and smooth; tongue and fremulum present; antennae simple.

Nenration as in Psaliodes.

Type: Rhinura variegata Warr. (Plemyriopsis).

It is necessary to remove this species from *Plemgriopsis*, with which it has no true affinity.

#### Rhodomena gen. nov.

I find that several species of *Hydriomena* from Sonth America differ from typical members of that genus in the shape of the palpi. In these the second segment is much elongated, curved above, and quite narrow where it rises from the first segment, the third segment short, decumbent; the palpi are porrect, laterally flattened, and rough-haired above and below; externally, in all cases examined, they are metallic dark green in colour. Moreover, in all the species which possess palpi of this structure, the metathoracic tuft is of the same metallic lustre. The two species praelatata and praemundata described by me both belong to this genus, and I propose praelatata as type. Both were originally described from  $\delta \delta$ : I have since seen  $\xi \xi$  of both; that of praelatata agrees with the  $\delta$  entirely; the single  $\xi$  of praemundata seen differs from the  $\delta$  in having the space beyond the cell and beyond the middle of the submedian interval suffused with reddish; this may not, however, prove a sexual difference.

### 154. Rhodomena lichenosa spec. nov.

Forewing: olive-green; the lines and bands purple-brown; extreme base dark; basal line thick, projecting on median vein, followed by a similarly shaped band with darker edges, almost interrupted in the cell; median line indented in cell and thickened into a blotch on submedian fold; postmedian line indented beyond cell, angled outwards above and below; submarginal band united to a blotch from apex, almost interrupted at middle and enlarged above; a marginal line of brown triangles at the end of veins; fringe brown; the central space is white, sprinkled with green scales, and more or less tinged with pink.

Hindwing: dull grey; fringes darker.

Underside dull greenish grey, with an under-tint of pinkish; costa of forewing marked with six dark greenish blotches, the intervals cream-colour, all becoming diffused as they descend from the costa.

Face cream-colour with two dark spots above; palpi dark green; vertex, thorax, and patagia dark and light green; abdomen cinereous, the segments of dorsum marked with dark and light green; metathoracic tuft dark green.

The single ? has the green and pink tinges deeper; the hindwing darker grey.

Expanse of wings; 3, 32 mm.; 2, 35 mm.

2 & d, 1 \, from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901—January 1902, wet season (Ockenden).

The species can be recognised, independently of its coloration, by the angulations of the postmedian line. The median line appears variable: in the whiter  $\delta$  it is strongly bulged outwards below middle, while in the  $\hat{\gamma}$  it is sharply angled outwards on the submedian fold, nearly straight from the angle to the costa.

#### Rhodomena roseoviridis spec. nov.

Forewing: olive-green; the lines dark brown; the whole middle third of wing occupied by an irregularly oval bright pink space, edged by the third and fourth lines; base itself black; first and second lines broadly blackish on costa and at inner margin, more or less obsolete between; the third and fourth lines irregularly waved, both swollen at costa; submarginal band waved externally, broad at costa and above middle, just touching a large apical blotch, and with a blotch to hindmargin at vein 2; marginal line black, swollen into triangles at the veins; fringe dark grey; the green intervals are centred with darker green.

Hindwing: dark slaty grey; fringe concolorous.

Underside blackish grey; darker towards costa, which is marked by three black blotches in the apical half of wing, the apical large, the middle one produced as a dark band across wing; all three preceded by cream-coloured blotches, the outermost one uniting with a blotch along hindmargin below apex. Hindwing with an indistinct paler band before the hindmargin.

Face pinkish ochreous, with two dark spots above; vertex dark, fringed with pink scales; collar faded green; thorax and patagia yellow-green; palpi, shoulders, and metathoracic tuft metallic blue-black, as are the dark spots on face and vertex; abdomen dark cinereous slate-colour.

Expanse of wings: 36 mm.

1 9 from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

An exceptionally handsome insect, allied to R. lichenosa.

## 156. Rhopalista dismutata spec. nov.

Forewing: greyish or ochreous flesh-colour in basal half, shading into dull olive towards hindmargin; the lines blackish, in places ill-defined and irregular; four equidistant lines in basal area, the two outer angled in cell, all more or less obsolete below median and quite obsolete below submedian vein; the edges of the central fascia consist each of two lines: the two inner widely divergent on costa, where they include a third line, and parallel below middle of cell; the outer two outcurved round cell and approaching the inner lines toward inner margin; these are followed by a dark line forming two large prominent teeth on veins 6 and 4, then incurved and running close and parallel to the other two, separated from them in submedian interspace by white or pale scales; then a dark grey line, similarly angled, but indistinct except in submedian interspace, where it is black and thick; a third similar line, distinct and black, is strongly marked on costa and in submedian interspace, its costal area forming a semicircular mark by its junction with an oblique streak from apex; submarginal line whitish, finely zigzag, and tipped at the angles with

black, preceded by a darker blotch beyond cell and in submedian interspace; pairs of black dashes along margin at end of veins, which are here finely black; fringe olive-green, black-mottled beyond veins; cell-spot linear, blackish: the submedian fold and vein are both dotted with black, and there is a projecting tooth of black scales from the middle of inner margin.

Hindwing: whitish towards costa, pale flesh-colonred ochreons tinged with grey along inner and hindmargins; the tuft of hairs in fold ochreons like the ground colour.

Underside of forewing pale grey, somewhat glossy, without markings, except along costa and hindmargin; of hindwing ochreous as above. Thorax and abdomen ochreous and grey; face pale ochreous; palpi olive fuscous.

Expanse of wings: 28-30 mm.

2 33 from Tucuman, October 1901, 700 metres (Dinelli).

Probably a variable species, as the only two examples differ considerably. The scheme of markings is somewhat involved, and they are moreover obscured by grey and olive patches of shading. To some extent the description of improbaria Schaus agrees with them, but the hindwings are totally different in coloration.

#### 157. Spargania daira.

Epirrhoë daira Druce, Biol. Centr. Am., Lep. Het. ii. p. 166. t. 56. fig. 26. 3%, Mexico. Spargania bellipicta Warr., Nov. Zool. viii. p. 468. 3%. Colorado.

The discovery of the identity of these insects was made accidentally, when I was comparing the types of S. American insects in Mr. Schaus's collection. The figure of daira in the Biologia does not give a very accurate idea. Mr. Schaus informed me that this is not by any means the only instance in which when collecting at high altitudes in Mexico he has met with insects also taken on the mountains of N. America.

# 158. Spargania intensa spec. nov.

Forewing: dark olive-green, without any yellow tinge, crossed by deeper green lines which are more or less obsolete, except along costa, where they are represented by black-green spots edged with gilded yellow; these spots are ten in number; three on the basal patch; the 5th and 6th represent the edges of the central fascia; the 4th and 7th, both small, indicate the dark lines of the two paler bands on either side of the fascia; the 8th, 9th, and 10th form the commencement of the usual three submarginal lines; the lines edging the central fascia, and a third between them, not reaching costa, are marked darker across the wing, the fascia itself being filled with much deeper olive-green; the ontermost line is swollen into a black patch beyond cell; all the darker markings are finely traced with gilded yellow; a black festooned marginal line; fringe green, mottled with black beyond the veins.

Hindwing: deep red; the base and inner margin dull blackish; a black marginal border, interrupted below middle; a black marginal festoon; fringe pale ochreous, reddish-tinged, and marked with black beyond veins; cell-spot blackish.

Underside blood-red; apper part of band beyond central fascia of forewing forming a yellow bracket-shaped mark, followed by a black submarginal band from below costa to vein 4; some strigae below cell, the cell-spot, and a spot

beyond it black; costa marked with alternate yellow and black linear dashes; bindwing with cell-spot, a double submarginal line, and a partial postmedian line blackish; the red ground colour speckled with yellowish; fringes of both wings yellowish, mottled with dark beyond veins, and tinged with red in middle of margin.

Head, thorax, and abdomen pale olive-green varied with darker; face much paler, almost white; palpi blackish green, mixed with paler scales; legs fuscous with ochreous mottlings.

Expanse of wings: 28 mm.

1 9 from Chanchamayo, January to August 1901 (Hoffmanns).

Slightly smaller than S. colorifera Warr.; both the green tint of the forewing and the red of the hindwing more intense.

### 159. Spargania rufifimbria spec. nov.

In markings this species agrees exactly with S. approbata Warr. from Bolivia, but the coloration and disposition of the tints is quite different. The central fascia of forewing is filled up with dark olive-green, the black edging and traversing lines sprinkled with yellow scales; the band on each side of it is whitish, with green and yellow dusting; the three black lines beyond middle, which in approbata are strongly marked, are here faint and blurred, and between the second and third is a distinct waved bluish white submarginal line; the fringe is dull coppery, mottled with dark green. The hindwing is uniformly copper-coloured without any trace of postmedian line; the base and inner margin slightly greenish; fringe coppery, whitish-tipped towards apex. On the under side of forewing between the postmedian and apical pale blotches is a single broad black fascia reaching to below middle, instead of the two black costal marks of approbata. The face is cream-coloured.

Expanse of wings: 39 mm.

1 7 from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., December 1901, wet season (Ockenden).

### 160. Spargania schistacea spec. nov.

Forewing: white, overlaid with slate-colour and grey, intermixed, towards base and apex, with yellow scales; edge of basal patch from near base of costa to one-fourth of inner margin, bent bluntly in cell; inner edge of central fascia from one-third of costa to middle of inner margin, also bent in cell and lumulate throughout; outer edge from just beyond middle of costa, oblique outwards and bluntly bent on vein 6, oblique inwards from vein 4, lumulate throughout, to two-thirds of inner margin; filled up with slate-colour and darker at the edges, containing a black linear cell-mark; followed by a white band with dark centre, both lumulate; the broad pale space before fascia, except at costa, is nearly as dark grey as the fascia, with its centre quite as dark; two black lumulate lines precede the pale grey submarginal line; apical area above vein 4 filled with a dark smoky grey shade mixed with yellow scaling; a dark marginal line; fringe pale with dark slate-coloured mottlings.

Hindwing: uniform slate-colour; fringe whitish, with dark marks beyond veins. Underside slate-colour; marginal area and outer edge of central fascia of forewing much darker, with a pale curved band between them; of hindwing uniform slate-colour.

Palpi dark slate, with tips of segments whitish; face whitish; vertex, thorax, and abdomen slaty grey; shoulders and patagia with yellow scales intermixed; fore and middle tibiae and tarsi mottled black and white.

Expanse of wings: 32 mm.

A pair from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., January 1902, wet season (Ockenden).

#### 161. Spargania semipallida spec. nov. -

Forewing: smooth, pale olive-green, crossed by deeper green lines, starting from dark costal spots edged with pale scales; these spots are nine in number—three on the basal patch, three on the central fascia, and three submarginal, the last two being often insignificant; the line nearest base, that edging the basal patch, the three lines of the central fascia, and that from the seventh spot are marked with blackish across the wing, and the last forms a black blotch beyond cell: the onter line of the central fascia in the sinus beyond cell is marked with a white lumule; the central fascia is suffused with deep green: marginal line black, interrupted; fringe green, chequered with black beyond veins.

Hindwing: whitish, with the base, an obscure central band, and the marginal border smoky grey, the last sometimes tinged with reddish towards apex; fringe whitish, mottled with black.

Underside of forewing dull red, with black striae; a patch of whitish scales beyond cell; the upper half of band beyond central fascia, the costal edge, some spots at apex, and a large blotch in hindmargin below middle, yellow; fringe yellow chequered with black beyond veins and tinged with red in middle. Hindwing yellow, densely striated with red; the marginal border, an obscure postmedian line, and the cell-spot marked with blackish and red.

Palpi, head, thorax, and abdomen pale and dark green; face pale ochreous; legs mottled fuscous and ochreons.

Expanse of wings: 32 mm.

3 & & from Chanchamayo, June—August 1901 (Hoffmanns).

Distinguished from S. colorifera and intensa, to both of which it is allied, by the whitish hindwings.

# Urocalpe gen. nov.

Forewing: costa arched at base, indented at middle, strongly convex before the depressed apex; apex blunt; hindmargin shortly vertical to vein 7, then oblique and faintly sinuous; anal angle rounded; inner margin rather convex, and shorter than outer margin.

Hindwing: with apex rounded, anal angle square; hindmargin with a small tail at the end of vein 3.

Antennae filiform, shortly pubescent; forehead rough-scaled below; palpi porrect, decumbent, rough-scaled, terminal segment curved; tongue and frenulum present; hindtibiae with four spurs.

Neuration as in *Perizoma*; areole of forewing double; discocellular of hindwing biangulate, the radial from the lower ontward angulation.

Type Urocalpe nigriplaga spec. nov.

Allied to Plengriopsis Warr, and Rhinura Warr, but differing from both in the outline of wings.

### 162. Urocalpe nigriplaga spec. nov.

Forewing: pale ochreous; basal patch black-brown, its edge running straight and oblique from one-third of costa to one-third of inner margin, traversed by obscure dark and pale lines, and containing below the median vein an oval space of pale ground colour; a black-brown subapical patch on costa, formed of three outwardly oblique short streaks, angled at vein 7; from the first four fine brown nearly parallel lines run to middle of inner margin slightly bent at vein 2, followed by a pale band with a slight central line; marginal area pale brown, marked above with traces of three or four lines with paler intervals, slightly darker on veins and forming a geminate black-brown waved patch before anal angle on inner margin; fringe pale beyond a dark marginal line; an apical pale streak; cell-spot small, brown.

Hindwing: with three or four waved grey transverse lines and darker grey marginal border, blackish at anal angle and traversed by a pale submarginal line; fringe pale, except at anal angle, where it is blackish.

Underside of forewing below middle blarred, above it ochreous, with the lines and markings red-brown; cell-spot brown in a pale ring; basal patch edged by a broad brown angulated fascia. Hindwing with all the lines and shading coarsely black-brown; cell-spot black in a large pale space; submarginal line waved, bluish-grey.

Head, thorax, basal and anal segments of abdomen black-brown; intermediate segments creamy ochreous with a brown dorsal spot on each; shoulders and patagia with some ochreous scales.

Expanse of wings: 28 mm.

1 & from Chanchamayo, June-August 1901 (Hoffmanns).

#### SUBFAMILY EUCESTIINAE.

# 163. Callipia aurata spec. nov.

Forewing: black; the costa dull brown with black streaks; a deep yellow blotch limited towards base by the subcostal vein above and submedian fold below; the outer edge rounded and irregular, leaving the subcostal vein at the discoellular, and curving between vein 4 and the submedian fold within three millimetres of outer margin; fringe black with brown marginal dots at end of veius.

Hindwing: wholly black with a greenish tinge.

Underside the same in forewing, but the inner margin duller, grey-brown; the apical area varied with long slender brown striae, and wholly brown round apex. Hindwing deep black, with the veins finely ochreous, covered throughout with fine long yellow striae; a patch of yellow scales at base of costal and median veins; a spot of ochreous scales at upper end of discocellular and at end of vein 7.

Head, thorax, and abdomen dull black; a streak of yellow hairs from sides of pectus over shoulders and base of patagia; sides of thorax and femora with yellow scales.

Expanse of wings: 62 mm.

1 & from Popayan, Colombia (Lehmann).

### 164. Callipia flagrans spec. nov.

Forewing: orange-red, with a broad black border; the costal area drab with blackish striae, and towards the apex drab striae from it encroach upon the black of the border; below the costa the black encroaches on the cell and ends in a point on the median vein at the origin of vein 2; beyond the cell above vein 5 at two-thirds of the wing is a small red spot, often with a pale drab spot above and contignous to it; below it the orange-red ground colour forms a small rounded upward projection, in one specimen touching vein 3 only, in another reaching well above that vein, and in the third touching vein 3; in this case the red and drab spots above are much exaggerated; fringe drab, the tips towards apex vinous red.

Hindwing: with the black border of uniform thickness, in two specimens produced narrowly and accompanied with striae along the costal margin, and in these instances the inner margin is slightly blackened and the median vein black; fringe drab, with a black spot below apex; fringe of inner margin black, rosy in the middle.

Underside of forewing with costal streak pale brown and the whole of apical area above vein 5 dark brown with dark and pale striae and the veins blackish, becoming pale ochreous at hindmargin; a pale ochreous marginal blotch from vein 5 to anal angle, where it is narrowed off; the fringe beyond it concolorous, above brown. Hindwing deep velvety brown, along inner margin black, along upper half of cell and expanding to apex paler brown; an ochreons-brown postmedian fascia from inner margin to vein 5, formed of contiguous quadrate spots; hindmargin irregularly pale ochreous; the whole surface with fine lengthy striations, pale on the darker ground, dark on the light; fringe ochreous, with a brown patch below apex: a pale ochreons discocellular scratch.

Head, thorax, and abdomen black, this last irregularly spotted laterally, and sometimes dorsally, with olive flesh-colour; patagia of the same colour.

Expanse of wings: 60 mm.

 $3\ \delta\ \delta$  from River Inambari, E. Peru, 1000 m., July 1900, rainy season (Simons). Distinguished from C. parrhasiata Guen. by the different tint of ground-colour.

In a fourth  $\delta$  from Peru the orange-red colour is restricted, the dark marginal border in both wings being much wider and in the hindwing continued broadly along inner margin to base.

# 165. Callipia occulta spec. nov.

Very near *C. aurata* Warr. from Colombia; differing mainly in the restricted size of the orange blotch; the black border along the inner margin, which in *aurata* does not reach above the submedian fold, here touches vein 2, while the median vein itself is black from base to the origin of that vein; the edge of the orange patch externally is vertical, and farther from the hindmargin; the fringe is wholly black without pale spots at the ends of the veins.

Underside as in aurata.

Expanse of wings: 56 mm.

1 ♂ from Pern.

In describing his constantinaria, Oberthür calls the costa of forewing both above and below, as well as the striolae of the underside of the hindwing, rosy. This does not apply to either occulta or awata; the costa being olive-brown, and the striolae ochreous-yellow and ferruginous.

### 166. Ameria seminigra spec. nov.

Forewing: deep red; all three margins black; the inner margin linearly throughout; costal margin gradually widening; apical and hindmargin distinctly, but still narrowly, black; fringe short, blackish.

Hindwing: black; fringe black; costal area for two-thirds red.

Underside like upper, but all the margins of forewing more broadly and diffusely black, the apex tinged with black, and the apical veins black.

Head, thorax, abdomen, legs, and antennae black; shoulders and patagia red.

Expanse of wings: 32 mm.

2 && from Chirimayo, S.E. Peru, 1000 ft., July 1901, dry season (Ockenden).

The neuration of the hindwing of the 3 is the same as that of the 3 of A. invaria Wlk., the discocellular for half the length of the wing running nearly parallel to the costa.

### 167. Eudule flavinota spec. nov.

Forewing: chocolate-brown; median and submedian veins orange from base to before middle; a short orange band from costa just beyond middle running vertical to vein 4, expanding outwards into orange streaks along veins 3 and 4, which are crossed by a curved orange line extending from vein 5 to vein 2; fringe concolorous.

Hindwing: uniformly chocolate-brown.

Underside duller; the orange markings reproduced.

Head, thorax, and abdomen chocolate-brown; shoulders with a lateral orange spot.

Expanse of wings: 22 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., January 1902, wet season (Ockenden).

### 168. Eudule malefida spec. nov.

Forewing: deep orange-red; costa shortly black at base; apical third black, its edge running straight from two-thirds of costa to hindmargin below vein 3; the inner margin narrowly black; fringe black throughout.

Hindwing: black; the costal margin pale pinky orange; below the median vein and vein 4 the black is less dense and the wing diaphanous.

Underside like upper, but the black duller, and on the inner half of hindwing somewhat bronzy green.

Head, thorax, abdomen, and legs all dull blackish.

Expanse of wings: 35 mm.

1 &, Upper Toro River, La Merced, August, September 1901, 3000 m. (Simons).

#### SUBFAMILY ASTHENINAE.

## 169. Amaurinia expallidata spec. nov.

Forewing: very pale ochreons green; a rather broad pale ochreons outer line, from three-fifths of costa, slightly curved outwards to vein 4, then oblique inwards to vein 2, thence vertical to two-thirds of inner margin; followed by three wavy lumbate pale lines, of which the outermost disappears below the middle; fringe

pale ochreous; cell-spot black; very faint traces of inner lines can be detected along the inner margin.

Hindwing: like forewing, but without cell-spot.

Underside, especially of forewing, suffused with a faint tinge of rosy, the lines showing paler.

Face brown; fillet and antennae white; vertex, thorax, and abdomen pale

green.

Expanse of wings: 19 mm.

1 ? from Trividad.

### 170. Cambogia anguinata spec. nov.

Forewing: deep yellow, still deeper along the costa: crossed by five pairs of sinuous blood-red lines, overlaid with lustrous scales; the extreme base red; the first pair of lines more diffuse; the middle pair thickest; the two outer series more or less broken up into lunules between the veins; a line of marginal dashes from apex to middle, below middle coincident with those of the outer line; fringe yellow.

Hindwing: without the two inner pairs of lines.

Underside paler; all the lines dull rosy, plainer in forewing, where they are laterally blotched, the inner margin remaining pale.

Face and palpi blood-red; vertex white; shoulders, patagia, and dorsum vellow marked with red.

Expanse of wings: 22 mm.

1 & from Charaplaya, Bolivia, June 1901, 1300 m. (Simons).

C. ambarilla Dogn. must resemble it in markings, but the lines are said to be grey, not red.

# 171. Cambogia antiopata spec. nov.

Forceing: whitish, tinged with pale flesh-colour; crossed by fine wavy brownish lines, plainer on inner margin; a brownish-purple costal streak from base to apex, out of which at five-sixths a broad curved band of the same colour runs to anal angle, beyond which the narrow marginal space is pale yellow; fringe yellow; cell-spot brown.

Hindwing: flesh-colour only at base, darkening outwards to the submarginal purplish band, which is broader than that of forewing; a geminate median and postmedian purple line, like the submarginal band overlaid with dull lustrous scales; marginal area and fringe yellow.

Underside pale yellowish, with the submarginal bands and costa of forewing dull purplish; forewing, except along inner margin, tinged with dull blurred rosy.

Face and palpi brown; vertex, fillet, and autennal shaft snow-white; collar and shoulders brown; thorax, patagia, and abdomen flesh-colour, the abdomen marked with dark, corresponding to the dark lines of hindwings.

Expanse of wings: 24 mm.

1 & from Charaplaya, Bolivia, 1300 m., June 1901 (Simons).

Somewhat resembling C. rubiada Dogn.

# 172. Cambogia bellissima spec. nov.

Forewing: basal half and costal area yellow washed with bright fulvons; basal patch and three outwardly oblique streaks beyond it, each thicker than the

one preceding, vinous purple overlaid with lustrons scales; cell-spot black, linear, lying in a yellow blotch from costa; beyond it three more lustrous streaks, inwardly curved below the middle; the first lying in the middle of a broad vinous purple blotch, starting narrowly from before middle of costa and curving round below cell-spot to coalesce with the purple of the third antemedian streak; the second only narrowly edged with vinous, the third swelling out below into a leaden-coloured cloud touching hindmargin below middle; marginal area and fringe pale sulphur-colour.

Hindwing: with basal area deep fulvons, limited by a broad antemedian straight band of lustrous scales edged with vinous purple; outer half of wing snlphur-coloured, with a slightly lustrous grey submarginal curved line, with very faint traces of an obscure line preceding it and a cloud beyond it below vein 4; fringe sulphur-coloured.

Underside with the lines and blotches all dull purple; the costal area yellow, the margins pale sulphur; hindwing like upperside, but duller.

Face, thorax, and dorsum fulvous; fillet and antennae white; abdomen beneath and legs pale.

Expanse of wings: 22 mm.

 $1\ \mathcal 3$ from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., January 1902, wet season (Ockenden).

Evidently related to the Mexican C. isabella Schans.

### 173. Cambogia delicatula spec. nov.

Forewing: bright yellow; the lines fine, lustrous lilac; the first near base, oblique to median vein, then incurved; second, antemedian, and third, median, oblique to subcostal vein, then vertical to median vein, thence incurved, the median followed by a deeper yellow line; postmedian line fine, less oblique from costa; onter line thick, crenulate, slightly angled at veins 6 and 4, and followed by a deeper yellow shade; submarginal line lumulate, interrupted; fringe yellow; no marginal line; some lilac scales at apex.

Hindwing: the same, but without the two inner lines; space between outer and submarginal lines pale ferruginous.

Underside of forewing dull rosy, the lines rather deeper; of hindwing dull yellow, with the outer margin rosy.

Face and palpi ruddy brown; fillet white; vertex, thorax, and abdomen yellow; antennae white.

Expanse of wings: 21 mm.

1 9 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden), type.

1 & from Charaplaya, Bolivia, 1300 m., June 1901 (Simons).

The transverse lines are at uniform intervals; both wings without a trace of cell-spots in the type ?; but in the 3 from Charaplaya, though worn, these are minute but plain.

## 174. Cambogia flavifulva spec. nov.

Forewing: eanary-yellow, the ground colour pure only along outer margin including the fringe, and on the costal and inner-marginal extremities of a broad antemedian band; the rest of the wing washed with fulvous deepening into brown;

basal area crossed by four curved rather wide pearly lustrons lines, indicating the usual basal and subbasal dark lines; postmedian area with three brown costal spots indicating three brown cross-lines, which are lost in the fulvous suffusion, but marked across it by three broad lustrons lines, the outermost very faint; a slight interrupted fulvous submarginal line in the yellow marginal area.

Hindwing: with the outer fascia only, this not reaching costa, dark brown in middle, and marked by two lustrous bands; base of wing slightly fulvous-tinged; a distinct brown cell-spot on both wings.

Underside dull yellow, the fulvous markings dull reddish, somewhat restricted; cell-spots brown.

Face, palpi, and shoulders brown; collar and vertex olive-yellow; fillet snow-white. Thorax and abdomen dull yellow, tinged with fulvous.

Expanse of wings: 22 mm.

1 % from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).

### 175. Cambogia funiculata spec. nov.

Forewing: yellow; cell-spot large, red-brown; before it four thin reddish vertical irregularly bent lines; beyond it from beyond middle of costa to middle of inner margin a slightly curved thick red-brown band, broader above, followed by a thick line which is insinuate beyond cell and on submedian fold so as to touch the band; the pale band beyond this line is traversed by a fine interrupted red-brown line, and followed by three parallel red-brown submarginal lines close together and suffused above anal angle; a red marginal line, swollen between the veins; fringe yellow, marked with red-brown at apex and beyond vein 4; all the lines coalescent laterally below the costa, the intervals between them forming small yellow spots on the costal edge.

Hindwing: with only two fine red basal lines; the thick band narrower and antemedian, straight, followed by a similar line to that on forewing; only two submarginal lines, farther apart, followed by a red-brown marginal band; fringe vellow, with a red-brown spot at vein 4.

Underside with all the markings duller.

Palpi yellow, externally red; upper half of face red, lower half yellow; fillet yellow with a red line above; collar yellowish; shoulders and base of patagia red, upper half of patagia yellow; thorax and abdomen yellow, the latter with reddish segmental rings.

Expanse of wings, 17 mm.

1 3 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

The hindwing is angled at middle. The species is closely allied to reticulata Schaus and tessellata Warr.

# 176. Cambogia griseicosta spec. nov.

Forewing: greenish grey, the whole wing, except along costal area, overspread with dull reddish brown; three lines near base, one antemedian just before the black cell-spot, forming the inner edge of central fascia, and two or three post-median, angled on vein 6 and again on 4, then oblique inwards; darkened between 1 and 6, and with pale tips to the lumnles; an outer and a submarginal line parallel

to the postmedian; all these lines are clear only in the pale costal space; a dark red crenulate marginal line; fringe red-brown, with bright pale base and paler tips.

Hindwing: dull orange, with reddish brown striae, the costa and inner margin paler; a large red-brown cell-spot, followed by a double red antemedian band from inner margin to vein 6, and traces of a submarginal line on inner margin; marginal line red-brown, with spots between the veins; fringe rufous.

Underside yellowish, washed all over with pale red-brown; the lines; all darker; cell-spots large, black.

Head, palpi, and antennae greenish grey; thorax and abdomen the same, dusted with reddish: in the redder specimen (type) the face and thorax are dull red; the smaller specimen is the darker.

Expanse of wings: 22-26 mm.

2 & d from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

#### 177. Cambogia intacta spec. nov.

Forewing and hindwing: dull yellow, without any markings except the brown discal spots.

Underside the same.

Head, thorax, and abdomen concolorous.

Expanse of wings: 26 mm.

1 9 from Bulim, N.W. Ecnador, 160 ft., January 1901 (Flemming & Miketta).

### 178. Cambogia lilacina spec. nov.

Forewing: lilac-grey without any distinct markings; the costa narrowly dark yellow; on this costal edge the commencement of cross-lines can be traced running very obscurely through the lilac ground colour; two close to base, two subbasal, two antemedian, four postmedian; cell-spot dark; marginal area from apex to anal angle dull dark yellow, sprinkled with ferruginous; the fringe pale yellow.

Hindwing: with the basal two-fifths like forewing in colour, edged by a median yellow band; outer half of wing yellow, thickly sprinkled with ferruginous, indistinctly crossed by three or four waved lines: fringe pale yellow.

Underside like upper, the lilac slightly reddish-tinged.

Face, palpi, thorax, and abdomen lilac, the abdomen varied in places with dull yellow; vertex and antennae snow-white.

Expanse of wings: 30 mm.

1 9 from Agualani, S.E. Peru, 10,000 ft., September 1904 (Ockenden).

One of the largest species of the genus; apex of forewing prominent, hind-margin oblique; that of hindwing bent at middle.

## 179. Cambogia restrictata Warr., Nov. Zool. viii. p. 458 (1901).

The  $\delta$ , from which the original description was made, was from Chiriqui, Panama, and expanded 24 min. From N.W. Ecnador there have come lately 3 ??, 2 from Bulim, I from Salidero, taken in February 1901 by Messrs. Flemming & Miketta, which are only 17 mm. in expanse. As so great a disparity in the size of the sexes is unusual in this genus, it may be that the Ecnador ?? represent a small race; nuless, indeed, the type  $\delta$  from Panama was abnormally large.

#### 180. Hydata diaphana spec. nov.

Forewing: very pale greenish, semi-transparent; the markings blackish grey: basal half of wing blackish grey, the grey projecting along costa and inner margin to the two outer lines and also running along veins 3 and 4; from one-third of costa a darker outwardly curved line, running in and forming a sinus on submedian fold and in its lower course edged with paler; two dark submarginal lines parallel to each other, the first fine and dentate-lunulate, the second much thicker, forming an outward tooth above vein 6 towards apex; fringe pale with dark grey dashes continuing the veins.

Hindwing: with a distinct pale curved antemedian line; the rest as in fore-

wing but with a thick dark marginal line; veins blackish.

Underside similar, the markings more diffuse. Head, thorax, and abdomen blackish grey.

Expanse of wings: 22 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).

This species should have been placed in the subfamily Geometrinae.

#### SUBFAMILY TEPHROCLYSTHNAE.

### 181. Chloroclystis microptilota spec. nov.

Forewing: pale greyish green; the lines black, all bent below costa, then oblique inwards; first slender, close to base; second and third from about one-third and two-thirds, limiting the central fascia, which is traversed by two or three greener lines and contains a rather large black cell-spot; a black submarginal shade, broken in places, preceding the pale waved submarginal line; fringe green, beyond a fine dark marginal line. The apex of wing is acute in the 3, rounded and blunt in the 9.

Hindwing: in ? quite small and narrow, with the edges of the central fascia darker, and a small cell-spot; in 3 aborted, pointed, whitish, without markings but with a long fringe.

Underside darker, with the lines blackish.

Head, thorax, and abdomen greenish: palpi green, very long, and rough-haired. Expanse of wings: 3, 17 mm.; 2, 15 mm.

1 &, 1  $^{\circ}$ , from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

## 182. Eucymatoge ochrosoma spec. nov.

Forewing: dull dark olive cinereous, with no distinct lines or markings, except the waved submarginal line, which is slightly lustrons; the paler bands edging the central fascia are just traceable, especially the outer; the lower angle of cell (which is short) is marked by a pale ochroons streak at the origin of veins 3 and 4; fringe concolorous, the basal half darker.

Hindwing: similar; an obscure dark cell-spot, and traces of three darker shades on abdominal margin; submarginal lustrous line thicker, and less definite.

Underside dull olive cinereous, the pale bands of forewing indicated.

Head, palpi, and antennae concolorous with wings; thorax, patagia, and abdomen pale ochreons.

Expanse of wings: 20 mm.

1 9 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

The areole is plainly double. It is probable that several more of the S. American insects, hitherto referred to *Tephroclystia*, will have to be removed to *Eucymatoge: longicorpus* Warr. and *linda* Dogn. I, have already found to have the areole double; in all these cases vein 11 rises far back.

### 183. Tephroclystia costivallata spec. nov.

Forewing: chalk-white with a blue-grey tinge; the markings slightly darker. grey; basal patch and central fascia both formed of two grey belts, their lines slightly darker-marked on the veins, and all forming blackish blotches on the costa; the pale belts on each side of central fascia wide, with a waved or punctulate middle line; marginal area dark grey traversed by a fine pale submarginal line, preceded on costa by a fifth darker blotch; marginal line black, interrupted by conspicuous pale spots at the vein-ends; fringe white, chequered with grey; veins in outer belt of central fascia marked with dark.

Hindwing: paler, with the outer lines repeated.

Underside suffused with grey, especially in the forewings, and with black cell-spots.

Head, thorax, and abdomen white; antennae dark grey.

Expanse of wings: 19 mm.

1 & from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

Forewing narrow, with oblique hindmargin; hindwing bent at vein 3. In these respects, and in the long ciliations of the antennae, the species approaches *T. perciliata* Warr., but the ground colour is wholly different.

### 184. Tephroclystia curvifascia spec. nov.

Forewing: pale brownish, suffused and dusted with fuscous; the cross-bands thick, angled below costa, and only distinct in the costal area; edge of basal patch angled in cell; central fascia with the inner band obscure, double at costa; the outer band thick and curved, distinct throughout; followed by a curved pale band, also distinct throughout; marginal area fuscous, the submarginal line very indistinct, marked in places by light and dark scales; fringe concolorous; cell-spot large, black.

Hindwing: similar, but without basal patch; hindmargin slightly incised before anal angle.

Underside paler, ochreous-tinged and glossy; the bands more visible, especially along costa; both wings with distinct outer and submarginal dark bands; cell-spots black.

Head, thorax, and abdomen like wings; palpi ochreous-tinged.

Expanse of wings: 19 mm.

1 ♀ from Newcastle, Jamaica.

# 185. Tephroclystia rubellicincta spec. nov.

Forewing: white; the extreme base and a submarginal fascia brick-red; all the other markings blackish grey; basal patch with outer edge oblique, the outer half grey; central fascia limited by two inner and three outer dark grey lines,

forming two grey belts; the first four all more or less irregularly dentate, the fifth blacker and more distinct, angled inwards below subcostal and outwards on vein 6, then inwardly waved to beyond middle of inner margin; the white bands preceding and following each with a blackish central thread and edged with blackish; submarginal line whitish, irregularly dentate, preceded by the brick-red fascia, the marginal space beyond dark grey; marginal line blackish, marked with a whitish dot at the ends of the veins, the intervals between them with fine blackish longitudinal streaks from the pale onter belt to hindmargin; fringe white with grey mottling beyond veins.

Hindwing: with the lines all blackish grey; the onter line of central fascia,

as in the forewing, thickest.

Underside whitish, suffused in forewing with grey, with two central lines and a marginal band grey, the latter broad in forewing, broken up in the hindwing.

Head, thorax, and abdomen white, much speckled with blackish; face with a grey spot in the centre; palpi white internally, reddish-tinged externally; antennae fuscous, with basal fifth white.

Expanse of wings: 27 mm.

 $1\ ?$ from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

## 186. Tephroclystia spurcata spec. nov.

Forewing: dull brownish, with dull fuscous suffusion; crossed by a series of darker waved lines which are most distinct on the costa, where they are wider; a paler brown fascia angled below costa at one-third and two-thirds; submarginal line white, lunnlate, preceded and followed by darker; fringe brown: cell-spot large, black, formed of raised scales; veins dotted black and pale.

Hindwing: brownish grey, with the markings plain along inner margin only;

a dark cell-spot; marginal line black, interrupted.

Underside brownish cinereous, with cell-spots plain and the lines indistinct.

Head, thorax, and abdomen brownish grey.

Expanse of wings: 26-30 mm.

Common from Chili.

The wings are broad, and the hindmargin of hindwing irregular, truncate at anal angle and nearly straight from vein 3 to 6.

## 187. Tephroclystia trigenuata spec. nov.

Forewing: pale ashy grey, darker grey along the hindmargin; the lines black, thicker towards costa; first from one-fourth of costa to one-fourth of inner margin, bluntly angled in cell and on submedian fold; second from before middle of costa to middle of inner margin, bluntly bent in cell and on submedian fold, in the cell touching a large black cell-spot; third from two-thirds of costa to three-fourths of inner margin, oblique outwards and bluntly bent at vein 6, angled below vein 4, and again inwardly angled on submedian fold; between these lines, which form the usual central fascia, less defined transverse lines are denoted by black scales and shading; the first and second are connected along submedian fold by a black dash; the pale submarginal line is scarcely indicated, except towards inner margin; the darker grey shade preceding it is tinged with rufous; marginal line black; fringe grey; on costa near base is a black spot, apparently the commencement of an obscure basal line.

Hindwing: whitish grey, with traces of black lines from inner margin.

Underside similar, but with the lines obscure.

Head, thorax, and abdomen grey.

Expanse of wings: 25 mm.

1 9 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

#### SUBFAMILY HETERUSIINAE.

## 188. Heterusia amplificata spec. nov.

Like II. quadruplicaria Hüb.-Gey., but with all the yellow rays brighter and broader; especially the outer one of bindwings, and that from the costa in the forewings; this swells out below the subcostal vein to more than twice the width of the corresponding mark in quadruplicaria, and nearly touches vein 1 before the anal angle. In size it is decidedly larger. On the underside it agrees in all particulars.

Expanse of wings: 36 mm.

1 & from Upper River Toro, La Merced, Peru, August, September 1901, 3000 m. (Simons).

#### 189. Heterusia fractifascia spec. nov.

Forewing: olive-brown, with a faint tinge of plnm-colour; a curved white streak from middle of costa to below vein 3, like the lower half of the foreleg of a horse in shape; fringe brown.

Hindwing: basal two-thirds grey, marginal third dark plum-colour, interrupted by a white blotch, starting broad from the end of cell, and narrowing before hindmargin, where it forms a white spot in the fringe below vein 6, and throwing off a spur to the costa before the dark margin.

Underside of forewing like upperside, but basal area whitish freckled with purplish; a patch of pale scales at anal angle, and a whitish line at base of fringe on costal half; the grey area of upperside whitish with purplish freckles, bounded by a thick purplish line, four times rectangularly bent before reaching the median vein, then broadly curved outwards; the space beyond it white, unspotted, projecting an arm to bindmargin between two dark purple blotches.

Head, thorax, and abdomen purplish cinerous.

Expanse of wings: 34 mm.

1 & from Balzapamba, E. Ecuador, 750 m., March 1899 (Haensch).

A species standing by itself; somewhat recalling colindata Wlk.

## 190. Heterusia liturata spec. nov.

Forewing: black; the markings pale sulphur-yellow; four costal marks, the first roundish at base, the second just beyond, oblique, the third and fourth vertical, tooth-shaped, at two-fifths and three-fifths; all four represented on median vein, the two first as clongate small spots, generally confluent, the two last as two large oval blotches confluent below, so forming a large kidney-shaped blotch; in one example these blotches are quite separate, the first round, the second transversely elongate; the submedian vein is sometimes marked with pale scales near base; fringe black chequered with pale between the veins above vein 3, wholly black below it.

Hindwing: sulphur-yellow, with four black interrupted curved bands, the first forming a basal patch, the second consisting of irregular blotches, the third of small spots, the fourth of square larger spots; all these bands interrupted in cell and beyond it; an uninterrupted curved black marginal border crossed between the veins by elongate pale streaks; fringe sulphur-colour, mottled with black; the inner margin blackish.

Underside like upper, but all the pale markings more developed, and in addition on the forewing a short submarginal outwardly dentate costal streak (traces of which in one example only are visible above); the fine pale mottlings of the fringe produced backwards across the pale basal line to form dagger-shaped markings; in the bindwing all the veins are broadly sulphur-colour; the curved bands are less interrupted along the cell; while the marginal band is broken up into a series of horseshoe-shaped blotches with a pale vein ending in each. Palpi sulphur-coloured with the tips black; face hairy, black; fillet sulphur; vertex black; collar sulphur; shoulders and patagia black at base, sulphur-coloured towards tips; abdomen black with the segments sulphur; abdomen beneath and pectus sulphur, the latter hairy; legs black with sulphur rings.

Expanse of wings: 28 mm.

4 33 from Baños, E. Ecuador, September 1899 (Haensch).

Allied to II. pretiosa Mssn.

#### 191. Heterusia ludisignata spec. nov.

Forewing: black, olive-grey at extreme base; an elongate white streak in base of cell attached at its end to a spot between the origin of veins 2 and 3; an oval yellow spot towards apex reaching from above vein 6 to below vein 5; a faintly paler streak above submedian vein from near base.

Hindwing: white, with black marginal border, its inner edge shouldered before apex.

Underside the same, but in forewing the streak along submedian vein is distinct, of bluish-white scales, the other white markings being hyaline white; the black round the white spots and before the yellow one is deeper, and in the hindwing forms a distinct angled submarginal line, with a white spot beyond it in the black border beyond cell, in one case showing on the upperside as well.

Head and thorax black; abdomen greyer; sides of face and patagia whitish. Expanse of wings: 35 mm.

4 && from Chanchamayo, Peru, January-August 1901 (Hoffmanns).

In one example the oval subapical spot is white. The palpi are long, curved downwards, and the inner margin of hindwing is attenuated.

# 192. Heterusia subspurcata spec. nov.

Forewing: black-brown with an olive tinge, with some sparse olive and orange scales about the wing, the olive scales near base massed together and making it appear lighter; before the end of cell above the median vein are a few orange scales hardly forming a distinct spot; half-way between them and apex is an elongated oval orange blotch, reaching from subcostal vein to below vein 4; some white scales along inner margin before middle; fringe dark with a few whitish flecks.

*Hindwing:* white, with broad black marginal border; the costa and base of wing with some smoky dark scales.

Underside of forewing olive fuscous, purplish brown in the middle; costal and marginal areas paler, dusted with whitish scales and striae, a white streak in cell from base; orange blotch as above: hindwing with the marginal border olive-brown, thickly covered with pale striae; a median curved dark line across the white basal field.

Head, thorax, and abdomen olive fuscous with pale specks; face grey; abdomen beneath white; tarsi spotted, black and white.

Expanse of wings: 26 mm.

1 & from Chanchamayo, Peru, January to August 1901 (Hoffmanns).

### 193. Heterusia thyridata spec. nov.

Forewing: black; the fringe black, slightly white-chequered between the veins; beyond the cell from vein 6 to 3 an oblique hyaline white blotch, its outer edge concave inwards, meeting inner edge at a point half-way down vein 3.

Hindwing: black.

Underside duller black, with a few cream-colonred speckles towards costa; on costa near base a cream-colonred spot; before apex an inwardly oblique streak of the same colour, and a small spot close to apex; the hyaline blotch of upper-side connected with costa by a narrow neck; hindwing with a deep red tinge, thickly striated with yellowish; a yellow spot on costa before apex; a powdery white lumulate-dentate band beyond middle and a fainter one before middle; a silvery lumulate cell-spot.

Face and palpi black above, whitish beneath; head, thorax, and abdomen

black; legs speckled, black and white.

Expanse of wings: 30 mm.

2 dd from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).

Related to *H. funesta* Warr., but the white blotch of different shape and differently placed; the underside of hindwing more marked.

#### SUBFAMILY OURAPTERYGINAE.

### Aplorama gen. nov.

Agrees with *Ratiaria* Wlk., except that the antennae, which in that genus are pectinated in the 3, are here quite simple. Like *Ratiaria* and *Phrygionis* it is without a frenulum.

Type Aplorama nazada Druce (Byssodes).

Druce's type was a  $\mathcal{F}$ : I have only seen two examples before, both  $\mathcal{F}$ , one from Merida, Venezuela, the other from Santo Domingo, S.E. Peru, whence also the present  $\mathcal{F}$ .

## 194. Phrygionis modesta spec. nov.

Forewing: uniform fawn-colour; the costal area to beyond middle tinged with luteons; drops of silvery scales along costa at base and one below median vein; a line of silvery scales on the inner edge of the two transverse lines, which are both uniformly luteous and narrow; the first nearly vertical from one-fourth of costa to one-third of inner margin, with two drops of silvery scales on the

subcostal vein on the outer edge; outer line from middle of costa to three-fourths of inner margin, also with two silver dots on its exterior edge on the subcostal; fringe pale straw-colour, fawn at apex and anal angle.

Hindwing: with the marginal fourth luteous, its inner edge parallel to the hindmargin which is not tailed or toothed at middle, but bluntly elbowed; the inner edge of the luteous margin with four silvery drops below the median vein; then a silvery line from costa to inner margin, and another from costa externally to a round silvery drop at the elbow; fringe as in forewing.

Underside paler, duller fawn; the markings of apperside showing through.

Head, thorax, and abdomen fawn-colour; the last paler beneath.

Expanse of wings: 40 mm.

1 ♂ from Minas Geraës, December 1898 (Kennedy).

Very near appropriata Wlk., but without a tail to the hindwing.

#### SUBFAMILY DEILINIINAE.

### 195. Lomographa acutipennis spec. nov.

Forewing: white; inner line indicated by a few dark scales on inner margin at one-third; traces of postmedian and submarginal lines parallel to hindmargin, represented by dark scales; fringe white; a small black cell-spot.

Hindwing: with the outer lines only and cell-spot.

Underside white.

Head, thorax, and abdomen white; face and antennae brown.

Expanse of wings: 24-26 mm.

2 9 9 from Onaca, Santa Marta, June to August (Engelke).

Distinguished from all other species of Lomographa by the acute apex of forewing.

# 196. Lomographa albifrons spec. nov.

Forewing: white; costal edge brownish towards base; a faintly expressed submarginal line, parallel to hindmargin but slightly bent inwards before costa; fringe white, beyond a very fine dark marginal line.

Hindwing: with the line curved.

Underside white, without markings.

Head, thorax, and abdomen white; face and palpi yellow-tinged; antennae ferruginous; forelegs fuscous in front.

Expanse of wings: 30 mm.

1 3 from Charaplaya, Bolivia, 1000 m., June 1901 (Simons), type; 3 3 3 from Chulumani, Bolivia, 2000 m., December 1901, wet season (Simons); 1 3, 1 % Santo Domingo, Carabaya, S.E. Peru, 6000 ft., January 1902, wet season (Ockenden).

Resembles circumrallaria Suell, and undilinea Warr., but distinguished by the pale face.

### Neobapta gen. nov.

Forewing: costa slightly curved at base and towards apex, which is depressed; hindmargin well rounded, faintly crennlate; inner margin somewhat convex.

Ilindwing: with hindmargin strongly rounded, slightly protuberant at middle, and incurved before anal angle and beyond cell.

Antennae of 3 simple, lamellate; palpi porrect, weak, reaching in front of face, hairy beneath, the third segment parrower, distinct; tongue and frenulum present; legs broken.

Neuration: forewing, cell fully half as long as wing; discoccillular faintly inbent above middle; first median nervule at five-eighths, second at seven-eighths; lower radial from bend in discoccillular, and therefore above middle, upper from upper angle of cell; 7, 8, 9, 10 stalked from two-thirds, 11 free: hindwing, costal approximated to subcostal for one-third of cell; veins 3 and 7 before angles of cell; no radial.

In the forewing the submedian vein is bent downwards near base, and elbowed upwards at one-fifth, emitting a short spur basewards from the elbow, but not forming a fovea.

Type: Neobapta indecora spec. nov.

The type species may be allied to Cabira ochropurpuraria II. S.; but the antennae are simple and the neuration somewhat anomalous.

### 197. Neobapta indecora spec. nov.

Forewing: dull greenish grey, thickly covered with transverse purplish fuscons striae, with traces of two lines; the first curved, at about one-third, indistinct, starting from a dark costal spot; the second submarginal, irregularly waved and thickened; a distinct blackish cell-spot; fringe (worn) concolorous.

Hindwing: rather darker, greyer; cell-spot and outer line only visible.

Underside paler, without markings.

Head, thorax, and abdomen concolorous.

Expanse of wings: 30 mm.

1 & from Rio Demerara.

#### SUBFAMILY PALYADINAE.

# 198. Argyrotome ferruginea ab. albinata nov.

Differs from typical ferruginea Warr. in the absence of the grey scaling in both wings, that colour being replaced by pure creamy white.

Underside, thorax, and abdomen all alike creamy white.

1 ? from Salampioni, Bolivia, 800 m., August 1901, dry season (Simons): sent with two others, from the same locality and with the same date, of the ordinary grey type.

## Gyostega gen. nov.

Forewing: triangular; costa slightly incurved before middle, convex at apex; hindmargin oblique, scarcely curved; inner margin broadly lobed before middle; median vein fringed with hair near base above.

Hindwing: ample; anal angle slightly produced, rectangular; apical angle rounded; hindmargin enrved above middle, straight below; inner margin lobed on basal half; a large wisp of hairs from base of submedian fold, nearly reaching middle of wing, covering a distorted furrowed space between veins I and 2, which forms a bulge on the under surface.

Antennae (3) filiform, shortly pubescent : frenulum long; tongue present;

palpi porrect, short and stout.

Neuration: forewing, cell half the length of wing; discocellular straight, oblique; first median nervule at two-thirds, second at eight-ninths; radials

normal: 7, 8, 9 stalked from just before angle of cell; 10, 11 coincident: hindwing, costal and subcostal closely approximated for quite half of cell; 3 and 7 just before angles.

Type: Gyostega floccosa spec. nov.

### 199. Gyostega floccosa spec. nov.

Forewing: white, overlaid almost entirely with purplish brown, partially lustrous, scales, the subcostal region alone remaining white; costa gilded yellow; markings obscure; a darker brown shade at base; another ending on inner margin near end of lobe; cell-spot dark brown, linear; a brown oblique mark from subcostal vein at four-fifths, preceded by a white subcostal triangle, becoming broader and diffuse, to hindmargin above anal angle; a subapical whitish streak dotted with brown; an interrupted brown marginal line; fringe brown.

Hindwing: white, rufous-tinged in the disc, with long grey-brown striations; marginal border silver-grey; fringe ochreous grey; basal tuft dark brown, the concealed down ochreous.

Underside pearly white; both wings with broad purplish brown border, and dark cell-spots.

Thorax and abdomen brown; head damaged.

Expanse of wings: 31 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., May 1902, dry season (Ockenden).

#### 200. Ophthalmophora contrariata spec. nov.

Forewing: dark brownish fawn-colour; the eosta pale yellow to before apex, narrow at base, gradually widening, and beyond middle forming a large triangular blotch; onter three-fourths of inner margin cream-colour, becoming yellowish at anal angle; at one-fourth from base a curved line runs to inner margin from a slight dent in the costal streak, darker than ground colour, with a somewhat paler edge; from the costal triangle an outer line runs, curved ontwards, to the inner-marginal streak before anal angle, slightly paler, edged on both sides with darker; a pale linear cell-mark; fringe brown with the tips shining white; beyond the costal triangle is a small patch of lustrous steely-blue scales.

Hindwing: with base brown, edged by a silvery white line, both much less oblique and narrower than in O. orion; a broad metallic line before hindmargin curving parallel to it and round again in the middle to vein 6; the space on each side of this line dull orange, the rest of the wing speckled, with black atoms along inner margin, and in the middle with red ones; three metallic embossed spots edged with black in a yellow ring lying in a curve convex outwards, parallel to the metallic line; in orion this curve is concave outwards; fringe glossy grey; a slight red cell-mark.

Underside whitish; apical third of forewing cinereous; eosta yellowish.

Head, collar, and basal segments of abdomen brown like wings; shoulders and patagia pale grey, the shoulders with a whitish line in front; abdomen darker grey, with a white line beyond the brown base; abdomen beneath and pectus white.

Expanse of wings: 30 mm.

1 d from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., May 1902, dry season (Ockenden).

### 201. Ophthalmophora lineata spec. nov.

Forewing: white; costa ochreous; first and second lines greyish buff; first from subcostal vein at one-fourth, slightly curved and slender; second at middle straight and thick, also from subcostal, concisely edged outwardly, diffuse inwardly; an outer white band from beneath costa to anal angle, preceded by a shade formed of greyish buff freekles deepening to the line, and followed by a similar shade deepening towards margin; fringe lustrons, dark greyish buff, with the tips paler.

Hindwing: with the middle line, ending at two-thirds of inner margin; a bright metallic submarginal line from anal angle, angled at vein 4, where there is a metallic spot, bent round below costa, and descending again to vein 4; the enclosed space above vein 4 pale buff, containing a small metallic black-edged spot in a paler buff ring; the space below vein 4 finely speckled with purplish; marginal area yellowish; fringe as in forewing.

Underside white; in forewing the apex and hindmargin beyond outer line dark grey; basal area above median paler ochreous-grey, the middle line slightly showing; fringe of both wings grey.

Head, thorax, and abdomen white; face and palpi greyish.

Expanse of wings: 35 mm.

1 3 from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., January 1902, wet season (Ockenden).

### 202. Ophthalmophora orion spec. nov.

Forewing: mouse-colour, with two darker transverse lines; first at one-fourth angled in cell, paler internally; second from three-fourths of costa, slightly sinaous and oblique to submedian fold, there obtusely angled and running straight to middle of inner margin; in its upper course it is somewhat paler-edged externally; below the fold it is followed by a broad white space, passing into fulvous yellow towards anal angle; the whole marginal area above is more or less mixed with fulvous red, except along costa, towards anal angle, and along hindmargin; fringe mouse-colour; cell-spot obscure, pale and vertical, with darker edge.

Hindwing: mouse-colour at base, edged by a straight darker line, continuing the outer line of forewing, and like that followed by white and fulvous; rest of wing fulvous orange; a metallic submarginal line, curved round below costa before apex and ending on vein 6; the centre of the fulvous space is dull brick-red, containing on the inner margin a large mouse-coloured cloud, and beyond cell three small occiloid spots in a curve, their centres metallic golden in a black ring, edged again with yellow and black; marginal line darker, fine; fringe reddish grey.

Underside of forewing pale mouse-colour, of hindwing pinky ochrous, the markings showing through.

Head, thorax, forelegs, and basal segments of abdomen mouse-colour; abdomen pale grey from third segment, which is marked in front by a pale ring connecting the pale basal edging of hindwings.

Expanse of wings: 30 mm.

3 33, 1 7, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

Danacata Wlk., to which the species seems nearest, has four occiloid spots on hindwing. The antennae of the  $\delta\delta$  are bijectinated.

#### 203. Ophthalmophora transversata spec. nov.

Forewing: dark grey-brown, crossed from the middle of costa to anal angle by a broad pure white band, slightly widening downwards; fringe grey; traces of a curved paler line close to base.

Hindwing: with base mouse-colour, edged by a straight dark shade, which is followed by a paler one; a curved metallic silvery submarginal line, the upper part of which from costa to vein 6 is continuous, represented by a rounded spot beyond cell, and thence to anal angle by three disconnected dashes; between veins 6 and 7 a large flattened oval yellow ring, round a velvety black central oval, the outer end of which bears a silvery crescent, the whole preceded by a silvery spot; the marginal space, the outer two-thirds of costa, and the space beyond basal line dull fulvous; a silvery spot at middle of costa, and scattered silvery scales across wing beyond basal line and along inner margin; all the space below the ocellus finely speckled with olive-ochreous, above vein 6 more or less fulvous-tinged; fringe grey.

Underside of forewing like upper, but basal area paler grey and the white band wider. Hindwing whitish grey, with the costal, apical, and hindmarginal regions dark grey.

Head, thorax, and abdomen mouse-colour: abdomen beneath pale grey; pectus white.

Expanse of wings: 37 mm.

1 & from Santo Domingo, Carabaya, Peru, 6000 ft., November 1901, wet season (Ockenden).

#### SUBFAMILY BRACCINAE.

#### Devarodes gen. nov.

Forewing: with costa curved; apex blunt; hindmargin obliquely curved.

Hindwing: rounded.

Antennae of 3 bipectinated; palpi short, porrect, pointed; tongue and frenulum present: a foveal bar visible in forewing.

Neuration: forewing, cell quite half as long as wing; discocellular concave; first median nervule at two-thirds, second shortly before third; radials normal; 7, 8, 9 stalked from upper angle of cell, 10 and 11 free; 11 anastomosing with 12 and 10 with 11 and again with 8, 9: hindwing, costal closely approimated to subcostal near base; the two subcostals from end of cell or stalked.

Type: D. bubona Druce (Devara).

Devara Wik., Cat. vii. p. 1660 (1856), was formed for his own previously described species Chrysauge erycinoides, identical with Emplocia bifenestrata II. S. (1855) the type of Emplocia, and therefore falls.

### 204. Devarodes albibasis spec. nov.

Closely allied to *D. bupaloides* Wlk., differing from that species in having the basal areas of both wings white, whereas *bupaloides* has the inner margin of both wings and costal margin of hindwing black. In the forewing the submedian vein is black across the white area.

Expanse of wings: 35 mm.

1 & from La Merced, Upper R. Toro, Pern.

#### 205. Devarodes bubona ab. translucens nov.

Differs from the type-form of bubona Druce in having the white basal area of forewing larger, and a similar area on hindwing also of dull bluish grey scales, leaving the margins only broadly black. On the underside the grey shades are all whiter.

1 & from Rosario, St. Inez, E. Ecuador, 1250 m., October 1899 (Haensch). Sent with an example quite typical from the same locality.

#### 206. Devarodes semialbata spec. nov.

Forewing: black, with a basal blotch and a small spot before apex between veins 4 and 6 pearly white; the edge of the basal blotch is ragged, running from one-third of costa obliquely outward to below vein 3, then bent at right angles, to inner margin beyond middle; the veins are also blackish, especially the costal and subcostal, and the costal edge, the subcostal space at base being dusted with dark scales; fringe dull black.

Hindwing: pearly white, with a broad diffusely edged black marginal border from costa before apex to anal angle, the base and inner margin slightly black-dusted.

Underside of forewing like upper, but the apical area grey-black beyond a broad curved velvety black band; an additional white costal spot at the edge of the black band. Hindwing, with the dark margin cut up into three blotches, one square, deep black, before apex, a diffuse blackish one from apex to middle, and a smaller submarginal one between veins 2 and 4, the intervals bluish grey.

Head, thorax, and abdomen blackish; sides of face, basal joint of antennae beneath, and underside of abdomen and legs whitish.

Expanse of wings: 26 mm.

1 ♂ from Marcapata, E. Peru (4500 ft.).

#### 207. Devarodes vestigiata spec. nov.

Forewing: dark smoky brownish fuscous, the veins and cell-spot blackish; basal third, except along costa, white, its outward edge diffuse; a cloudy pale brownish sinuate band before hindmargin, formed of patches between the veins, starting from below costa before apex, marked with whitish scales above and below vein 7, incurved from 5 to 2, then bent out to anal angle, the intervals on either side of vein 6 beyond discocellular with faint brownish streaks; fringe concolorous.

Hindwing: white, with a broad curved marginal border from before apex to above anal angle.

Underside like upper, but without any trace of the band of forewing; the whitish basal area rather larger.

Head, thorax, and abdomen brownish fuscous; face with whitish lateral edges; crown with a pale patch at middle; patagia pale above near base and beyond middle; tongue yellow.

Expanse of wings: 33 mm.

1 & from Chulumani, Bolivia, 2000 m., January 1901, wet season (Simons).

### 208. Emplocia coliadata spec. nov.

Forewing: velvety black, with two whitish hyaline spots; one clongate between the median vein and submedian fold, reaching from base to half the length

of wing; the other subquadrate, beyond cell; the space beneath the basal blotch between the submedian fold and vein is mixed with pale scales; fringe black.

Hindwing: pale yellow, with the outer third deep black, its edge diffuse and shouldered at the rise of 6 and 7.

Underside of forewing velvety black in cell and beyond and below it towards anal angle; a stripe of white scales between costal edge and subcostal vein; apical area olive-grey-brown, with the veins across it black; the basal streak white from median to submedian vein. Hindwing with all the veins black, the marginal border smoky grey.

Face and antennal shaft snow-white; palpi, pectinations of antennae, and vertex black; the last with a white spot on its middle and some white behind the eyes; shoulders and patagia black and white mixed; abdomen grey, the basal segments whitish on dorsom.

Expanse of wings: 39 mm.

1 & from Upper Toro River, La Merced, Peru, August, September 1901, 3000 m. (Simons).

209. Nelo divisa Warr., Nov. Zool. vii. p. 192 (1900), and ab. radiata id., Lc. viii. p. 474 (1901).

The  $\mathfrak{P}\mathfrak{P}$ , both of the type form and the aberration, are larger than the  $\mathfrak{I}\mathfrak{I}$ , expanding 34 mm.; they differ from the  $\mathfrak{I}\mathfrak{I}$  only in the greater extent of the red markings. Both  $\mathfrak{P}\mathfrak{P}$  come from Ecuador, accompanied by a  $\mathfrak{I}\mathfrak{I}$ , which also is larger than the type specimen, being 30 mm. in expanse.

## 210. Sangala aenea spec. nov.

Like Sangala\_antiphates Druce above: the forewing with a few red scales beyond lower angle of cell.

Underside of forewing with a short red streak at base of costa and some red subcostal scales beyond; hindwing without any trace of pale blotches below apex; both wings dark bronzy brown, with a slight bluish tinge, the veins of the hindwing dark. Abdomen with slender red lateral lines.

Expanse of wings: 38 mm.

2 dd from Chanchamayo, January—August 1901 (Hoffmanus).

## 211. Sangala regia spec. nov.

Forewing: black-brown, with a narrow red line along costal vein, and beyond the cell an elongated red blotch from the subcostal to below vein 2, rounded and narrowed at top and bottom, outwardly slightly curved, the veins crossing it forming protruding teeth on the outside edge, veins 2 and 6 being marked across it with black scales.

Hindwing: rather browner.

Underside bronzy-brown; the cell nearly filled up with red and sometimes confluent above with the large blotch; space above submedian fold, below cell, and round the red blotch black; the veins finely black. Hindwing with the veins thickly black; a curved postmedian and marginal darker band, with a paler band between them; base of wing red.

Head, thorax, and abdomen black; a white spot in middle of forehead above, one behind each eye, and one laterally at base of shoulders; legs black; the base

of coxae and femora white-spotted, and one or two white spots on sides of abdomen at base. The pectinations of antennae as in Sangala, but longer than usual.

Expanse of wings: 44 mm.

2 & &, Chanchamayo, Peru, June—August 1901 (Hoffmanus).

Allied to fustina Druce and numbalensis Dogn.

### 212. Sangalopsis crescens spec. nov.

Forewing: brown-black; beyond middle of wing an oblique roughly crescent-shaped red band from subcostal to vein 1, its outer edge regularly curved, its inner irregularly waved; fringe concolorous.

Hindwing: brown-black, without markings.

Underside similar, but the apex and costa of forewing paler, dull brown; hindwing also paler, with the veins black.

Head, thorax, abdomen, and legs all black.

Expanse of wings: 30 mm.

5 & from Chanchamayo, Peru, June -August 1901 (Hoffmanns).

The red crescent varies in breadth.

Allied to S. lippa Schaus, from which it is distinguished by the absence of red markings on body and underside of hindwing.

### 213. Sangalopsis curvifera spec. nov.

Forewing: dark velvety brown; an oblique dull orange blotch beyond cell from just above vein 6 to vein 2, narrow above, broader and rounded below, the onter edge slightly curved and well defined, the inner diffuse, crossed by dark veins; fringe concolorous.

Hindwing: wholly velvety brown.

Underside dark brown, slightly paler towards apex; the orange blotch larger hindwing deep brown with the veins black.

Head, thorax, and abdomen all brown-black.

Expanse of wings: 38 mm.

1 & from Rosario, St. Inez, East Ecuador, 1250 m., April 1899 (Haensch).

### 214. Sangalopsis ficifera spec. nov.

Forewing: brown-black, with a large orange fig-shaped blotch just beyond middle of wing, the stalk starting from costal vein a little beyond middle, the broad end touching vein 1.

Hindwing: somewhat browner.

Underside grey-brown, darker round the blotch; this is marked beneath costa by a short patch of white scales; the patch itself is flat and broad towards costa, and has its inner edge irregular and jagged. Hindwing with the veins thick and black; a patch of white scales from costa to the base of veins 6, 7, and another on inner margin to the origin of vein 2; a curved black submarginal band narrowing to anal angle, the area beyond it paler.

Head, thorax, and abdomen black; autennae and legs black.

Expanse of wings: 25-30 mm.

2 & from Chanchamayo, Peru, June—August 1901 (Hoffmanns).

The smaller specimen has the white markings underneath the hindwing more restricted.

## 215. Sangalopsis flaviplaga spec. nov.

Forewing: deep brown-black; a short orange streak from base above subcostal vein; an oblique orange blotch beyond cell from subcostal vein to vein 1, faintly curved and well defined on its outer edge, slightly bent in at middle on the inner edge; fringe brown-black.

Hindwing: uniform brown-black.

Underside with costal yellow streak at base broader; the apex of wing beyond the orange blotch paler; hindwing deep brown, with the veins black.

Head, thorax, and abdomen black.

Expanse of wings: 32 mm.

1 of from Chulumani, Bolivia, 2000 m., January 1901, wet season (Simons).

## 216. Sangalopsis fulvimedia spec. nov.

Forewing: black; the middle third occupied by a deep orange fascia, not quite touching either costa or inner margin; its outer edge from just beyond middle of costa, slightly but regularly curved; its inner edge jagged, forming a rectangular projection on the median and an acute point on the subcostal vein, above which a narrow fine-pointed streak of orange is emitted from the blotch to base.

Hindwing: brown-black.

Underside brown; forewing with the costal streak broader; the orange markings limited by darker brown. Hindwing with the veins thick and black.

Head, thorax, abdomen above and below, legs, and antennae all black; a small orange lateral spot at base of forewing.

Expanse of wings: 36 mm.

3 & from Chanchamavo, Peru, June-August 1901 (Hoffmanns).

# 217. Sangalopsis luteiplaga spec. nov.

Forewing: deep brown-black, with a large luteous blotch beyond cell, reaching from vein 7 to below vein 2, rounded at top and bottom, and of nearly uniform width throughout; fringe brown-black.

Hindwing: uniform brown-black.

Underside dull brown, deeper from base to blotch, and narrowly round blotch; the blotch broader, straight cut and square at top, more pointed toward anal angle; hindwing with the veins black.

Head, thorax, and abdomen black.

Expanse of wing: 40 mm.

1 & from Baños, Eastern Ecuador, September 1899 (Haensch).

# 218. Sangalopsis signigera spec. nov.

Differs from S. flora Warr. (Nelo) in the position and shape of the red blotch; in flora this is beyond middle of wing, therefore more vertical in direction, and broader below than above; in signigera the blotch is exactly central, and more oblique, of uniform width throughout, and emitting a fine red streak basewards along the subcostal vein.

Underside the same. A small red dot on side of thorax at base of forewing.

Expanse of wings: 32 mm.

2 33 from Charaplaya, Bolivia, 1300 m., June 1901 (Simons).

Closely allied to S. fulvimedia from Peru, but smaller, and the transverse blotch much narrower.

#### SUBFAMILY NEPHODIINAE.

### Heteroleuca gen. nov.

Like Nipteria in shape and neuration of wings, except in one point; the discocellular of forewing is oblique inwards from the top end of cell for three-fourths, then angled outwards, vein 5 from its middle, above the angulation. Pectinations of the antennae of the 3 altogether different, being stiff and broadened at the summit, exactly like those of Nelo and Sangala.

Type: Heteroleuca albida spec. nov.

## 219. Heteroleuca albida spec. nov.

Forewing: dull white, semitransparent, the veins brown; costal area above subcostal vein slightly luteous-tinged, the costal edge grey; fringe brown-grey with white base.

Hindwing: with the fringe whiter.

Underside with the veins of both wings dark.

Head, shoulders, and base of patagia luteous grey; palpi black; thorax and abdomen dull white; antennae black.

Expanse of wings: 48 mm.

1 ♂ from Chanchamayo, Peru.

### Hyalopola nom. nov.

I propose this name in place of *Hyalospila Warr.*, Nov. Zool. i. p. 425 (1894), preoccupied by Ragonot, Nouv. Genres et Espèces de Phycitidae p. 11 (1888).

## Hydatoscia gen. nov.

Forewing: costa slightly curved throughout; hindmargin elbowed at vein 4, vertical, slightly concave above, oblique and concave below.

Hindwing: with apex rounded, and anal angle distinct; hindmargin crenulate, with a distinct tooth at vein 4.

Antennae of 3 pectinated; of 2 subserrate, setulose; palpi weak, porrect, slightly upcurved, scaled beneath; tongue and frenulum present.

Neuration: forewing, cell more than half as long as wing; discocellular sinuous, incurved above, oblique below; vein 2 at one-half, vein 3 at five-sixths; 5 from just below middle of discocellular, from the upper end of the oblique lower arm, sinuous; 6 from upper end of cell; 7, 8 stalked from the same point; 9, 10 free, from cell; 11 out of 12, 10 anastomosing with 11 and 9 with 10, 9 again anastomosing with 8 rather strongly before costa; 7 curved downwards: hindwing, costal and subcostal closely approximated to nearly half of cell, 7 just before end of cell; no radial; medians as in forewing; scaling very sparse, wings nearly transparent. Forewing with foveal bar developed in both sexes.

Type: H. ategna Druce (Trygodes).

# 220. Leuculopsis bilineata spec. nov.

Forewing: glossy white; the veins finely brownish; the lines pale brownish; first at one-third slightly curved ontwards to two-fifths of inner margin; second from three-fourths of costa, ontwardly curved to vein 2, then parallel to first line, to three-fifths of inner margin; fringe white, with a darker brown dividing line from vein 7 to 2.

Hindwing: with onter line only.

Underside white without markings; costa of forewing bronzy grey. Head and shoulders yellowish; thorax, patagia, and abdomen white.

Expanse of wings:  $\delta$ , 35 mm.; ?, 35—40 mm.

2 & d d, 3 ♀♀ from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November, December 1901, January 1902, wet season (Ockenden).

### 221. Nipteria astyochiodes spec. nov.

Forewing: white, somewhat discoloured along costa, with a linear grey cell-spot on discocellular, and two waved grey lines; first vertical from costa a little before the middle, straight above the median vein, then waved and oblique inwards; onter line from four-fifths of costa, ontcurved at first, then parallel to hindmargin; a thin marginal line and the veins grey; fringe white.

Hindwing: with a single waved grey marginal line.

Underside white; the costa of forewing broadly grey towards base.

Head, thorax, and abdomen white, the head and shoulders yellowish-tinged.

Expanse of wings: 28 mm.

2 & d, 3 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November, December 1901, wet season (Ockenden).

In markings a perfect mimic of Astyochia claelia Druce and philyra Druce; but the discocellular of forewing is straight, and the hindwing of 3 without any tuft of hairs on inner margin near base. The hindwing, as in philyra, is also slightly protuberant at middle of hindmargin.

## 222. Nipteria flaviplaga spec. nov.

Forewing: greyish fuscous, thickly speckled with dark fuscous; the lines dark fuscous, with darker dots on the veins: the first at nearly one-third running a little outwards to the median, then vertical, bent inwards on submedian fold; onter line from four-fifths of costa straight to vein 6, then oblique and straight inwards to two-thirds of inner margin, marked beyond vein 5 by an irregular small yellow blotch; cell-spot distinct, black; fringe brownish fuscous.

Hindwing: wholly blurred dark grey, with traces of a dark cell-spot and of a curved postmedian dark line.

Underside of forewing dark fuseons and striated only along costal and hindmargin, the whole interior being paler and the line faint; the hindwing, on the other hand, darker than above, with the line and cell-spot dark and distinct; the yellow spot of forewing as on upperside.

Head, thorax, and abdomen fuscous like wings.

Expanse of wings: 40 mm.

1 9 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).

# 223. Nipteria flebilis spec. nov.

Forewing: dull cinereous grey, spotted and suffused with darker grey along costal and hindmargin and in the basal area; the costal edge with some white marks in the apical half; the two lines dark; the first obsence, from one-fourth of costa to one-third of inner margin; the outer line thick, straight and slightly waved, from four-fifths of costa to two-thirds of inner margin, edged outwardly with a faintly paler line; marginal area dark above, paler below, the limit of the

darker and lighter shade running obliquely from the outer line at vein 4 to hindmargin at vein 2; cell-spot dark and large; fringe dull grey with white mottling between the veins.

Hindwing: paler, more distinctly striated, the outer half dark; fringe as in forewing.

Underside whitish, with distinct dark greenish fuscous speekling and striation; inner marginal half of forewing dull whitish; costa spotted with dark; cell-spot and outer line from costa to vein 4 dark. Hindwing with dark cell-spot and an interrupted central line, formed of a blotch at costa and another between the median and vein 2; the inner margin white.

Face and collar pale grey; palpi, vertex, and thorax dark; abdomen paler with dark segmental rings.

Expanse of wings: 36 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).

A dull-looking species, but with strongly white-mottled fringes.

### 224. Nipteria oblitaria spec. nov.

Forewing: dark grey in 3, paler, more brownish grey in 2; the whole wing surface, except the costal area, appearing blurred, as if rubbed; the darker costal space slightly striated; the only markings are a round dull black cell-spot, and an onter oblique line from costa at five-sixths, bent on vein 5, below which it is very indistinct; fringe dark grey.

Hindwing: with cell-spot and the line curved.

Underside smoky brownish fuscous, thickly speckled and striated with blackish; cell-spots and outer line black and distinct; in the ? the inner half of forewing is slightly blurred, but in the 3 the blurred space is as extensive as on the upperside and quite pale, greyish ochreous.

Head, thorax, and abdomen dark grey in the 3, brownish grey in the \$, agreeing

with the wings.

Expanse of wings: 44 mm.

A pair from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., May 1902, dry season (Ockenden).

This species is probably near N. tapponia Th. Mg., which I have not seen.

# 225. Nipteria satyrata Warr., Nov. Zool. vii. p. 190, 9 (1900).

The  $\mathcal{S}$  of this species differs from the  $\mathcal{P}$ , in that the upper surface of the wings is wholly dull sericeous grey without darker markings, except the cell-spots, and three vein dashes representing the costal portion of exterior line on forewing. Beneath like the  $\mathcal{P}$ , but the dark markings and band of hindwing less striking.

The  $\delta$  from which this description is made is from Chimate, Bolivia, and is of the same size as the  $\hat{\gamma}$ , 52 mm.

## 226. Nipteria subocellata spec. nov.

Forewing: dull smoky grey, semitransparent; the hindmargin, the entire apical area beyond the cell, and the costal area above subcostal vein smoky blackish; cell-spot black, preceded by a small blotch slightly paler than the ground colour; fringe blackish, veins slightly brownish.

Hindwing: dull smoky grey, rather darker towards hindmargin; cell-spot obscure.

Underside of forewing like upper but not so dark, the small blotch before cell-spot whitish and conspicuous. Hindwing dark smoky grey, with small cell-spot; inner margin paler.

Head, thorax, and abdomen dingy dark grey; antennae blackish.

Expanse of wings: 32 mm.

1 & from Charaplaya, Bolivia, 1300 m., June 1901 (Simons).

Distinguished by the pale blotch before cell-spot.

#### 227. Nipteria transducta spec. nov.

Forewing: dark ashy grey, semitransparent, faintly dappled with darker; the lines fuscous; the first slender, from one-fourth of costa, running ontwards and bent below costa, then vertical to one-third of inner margin; second line from apex, thick and straight, to two-thirds of inner margin, the area immediately beyond it whitish, becoming again dappled dark grey at hindmargin; all the veins, the marginal line, and discocellular finely fuscous, the discocellular with a dark spot at middle; fringe paler grey.

Hindwing: with the outer line of forewing continued straight across to two-thirds of inner margin, nearly touching the cell-spot.

Underside the same, but paler in all respects; the hindwing with a curved submarginal line, joining outer line on inner margin, which is faintly visible above also.

Face, thorax, and abdomen grey: vertex bright yellow.

Expanse of wings: 40 mm.

1 9 from Santo Domingo, Carabaya, S.E. Pern, 6000 feet, December 1901, wet season (Ockenden).

The hindmargin of hindwing bears a small blunt tooth at vein 4.

# 228. Nipteria turpis spec. nov.

Forewing: dull dark grey, thickly striated with darker; the inner and outer lines finely blackish and marked by spots on the veins; first from costa at one-fourth to inner margin at one-third, bent outwards to the median vein, then vertical or slightly oblique inwards; outer line from three-fourths of costa, vertical to vein 5, then oblique and straight to three-fourths of inner margin; cell-spot blackish; fringe dark grey.

Hindwing: similar, but less striated and paler towards base, darker along inner and hindmargins; outer line alone visible, more or less obsolete above middle; cell-spot obscure.

Underside like upper; the onter line only marked in both wings.

Head, thorax, and abdomen all concolorous.

Expanse of wings: 3, 35 mm.; 9, 38 mm.

2  $\delta\delta$ , 1  $\circ$ , from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November, December 1901, wet season (Ockenden).

# 229. Perigramma nigricosta spec. nov.

Forewing: white, the veins brownish; the costa thickly black from near base to just before apex; fringe white.

Hindwing: white, without markings.

Underside wholly white; the costal edge of forewing grey.

Thorax and abdomen white; face and vertex dark brown.

Expanse of wings: 44 mm.

5 & from San Ernesto, Bolivia, 1000 m., August, September 1900, (Simons).

## 230. Perigramma semipleta spec. nov.

Forewing: white; the costa narrowly, the inner margin below submedian vein, the hindmargin, and a bar straight from three-fifths of costa to anal angle dark grey; the apex more broadly grey; fringe grey; the median veins dark grey.

Hindwing: with costa and hindmargin grey; the inner margin narrowly and

the space between veins 3 and 4 dull grey; fringe whitish; all the veins grey.

Underside similar; but in the forewing the costa is broadly grey from base to bar, and in the hindwing only the costa and hindmargin are grey.

Face and vertex brownish fuscons; thorax and abdomen white; tips of patagia and anal segments of abdomen slightly grey-tinged.

Expanse of wings: 44 mm.

1 & from San Ernesto, Bolivia, 1000 m., August, September 1900 (Simons).

In P. nervaria Guen, the space between veins 3 and 4 on the forewings is filled up with grey, and the wings have no bar.

### Zeuctostyla gen. nov.

Forewing: elongate: costa straight, convex only towards apex, which is rounded; hindmargin obliquely curved.

Hindwing: with both angles and hindmargin rounded.

Antennae of & bipectinate; palpi upcurved, hairy beneath, third segment hidden; tongue and frenulum present; legs slender; hindtibiae somewhat thickened, with four spurs and a pencil of hairs.

Forewing with a fovea at base and a short bar above it.

Neuration: forewing, cell two-thirds of wing; discocellular obliquely concave; first median nervule from before one-half; second at three-fourths; radials long-stalked together, from upper end of cell, the subcostal strongly depressed towards its extremity; 7, 8, 9 stalked from the bend, 7 strongly bent downwards towards margin; 10, 11 coincident, anastomosing with stalk of 7, 8, 9. Hindwing, cell about half as long as wing; discocellular oblique; 6, 7 stalked; no true radial.

Type: Zeuctostyla rubricollis, spec. nov.

# 231. Zeuctostyla rubricollis spec. nov.

Forewing: hyaline bluish; costal, inner, and hindmargins black, the last more broadly, especially at apex; the median vein and its three branches thickly black, the two folds more narrowly; an oblique black bar over the discocellular; the stalk of 5 and 6 thickly black to the fork, then finer; submarginal area above vein 4 white.

Hindwing: the same; the inner margin very narrowly black; subcostal vein and branches black; discocellular narrowly black; no white area.

Underside similar.

Head, thorax, and abdomen black; basal joint of palpi, pectus, collar, and shoulders orange-red.

Expanse of wings: 33 mm.

2 dd from Santo Domingo, Carabaya, S.E. Pern, 6000 feet, January 1903, wet season (Ockenden).

In size and superficial appearance this species mimics Tanaostyla unimacula Warr.; but the difference in neuration and the red collar will serve to distinguish it.

#### SUBFAMILY BISTONINAE.

### Hetererannis gen. nov.

Forewing: clongate; costa straight; apex bluntly rounded; hindmargin oblique, faintly curved; anal angle rounded off; fovea present.

Hindwing: produced below apex, rounded; hindmargin nearly straight; anal angle rectangular.

Antennae of  $\delta$  strongly bipectinate, the extreme tips serrate. Palpi shortly porrect, rough beneath, the segments obscured; tongue absent; frenulum well developed. Hindtibiae with four spurs, hardly swollen.

Neuration: forewing, cell more than half as long as wing; discocellular inangulated in middle; first median nervule just beyond middle, second at five-sixths, well before end of cell; lower radial from slightly above centre of discocellular, upper from upper angle; 7, 8, 9 stalked from a little before end of cell; 10 and 11 coincident. Hindwing, costal and subcostal closely approximated for quite half of cell; 7 only just before end; no radial; medians as in forewing.

Type: Hetererannis obliquaria Grote (Boarmia).

Manifestly allied to Erannis Hüb., but separated by the bipectinate antennae of the  $\delta$  and the presence of a fovea in the forewing.

#### SUBFAMILY ASCOTINAE.

## 232. Bryoptera basisignata spec. nov.

Forewing: white, finely black-speckled, and suffused in parts with pale sepiabrown; inner and outer lines strongly marked, velvety black; the inner from one-fourth of costa, slightly angled inwards on the subcostal vein, then obliquely curved inwards, and much thickened below the median vein, preceded in lower half by a brown shade; outer line from two-thirds of costa to three-fifths of inner margin, slightly angled outwards on veins 6 and 4, insinnate between, below vein 4 incurved; median line fine, from a dark spot on costa, rectangularly bent outwards round the distinct round black cell-spot, then curved parallel to outer line, the space between them below the middle filled in with sepia-brown; submarginal line whitish, regularly zigzag, the space between it and outer line pale brown, mixed with whitish towards inner margin; marginal area brownish, darker in some specimens at costa and beyond cell; a row of distinct black marginal spots; fringe white, mottled with grey brown.

Hindwing: with a velvety black streak near base of inner margin; a black cell-spot, preceded by a brown shade from middle of inner margin, the inner edge of which is straight; outer line and marginal area beyond it as in forewing.

Underside dirty greyish, with darker marginal borders, and distinct cell-spots; apex of forewing and fringes of both wings whitish.

Head and thorax white sprinkled with grey scales; abdomen greyer, with the segmental divisions darker, the second segment with a broad velvety black ring; palpi externally blackish.

Expanse of wings: 35 mm.

4 & d from Santo Domingo, Carabaya, S.E. Peru, 6000 feet, November 1901, wet season (Ockenden).

Distinguished from other species of the genus by the strong black inner line of the forewing, bent round on inner margin of hindwing, and continued across the abdomen; also by the large black cell-spots.

### 233. Bryoptera canidentata spec. nov.

Forewing: white, with a few grey speckles; costa with some fine dark striae; basal and exterior lines black; the first thick, from one-fourth of costa, vertical, curved basewards only below submedian vein, preceded in its lower half only by a similar thick line; outer line finer, from two-thirds of costa to two-thirds of inner margin, slightly waved, and bluntly bent at vein 4; median line outwardly oblique from costa above the small cell-spot, roundly bent at vein 6 and more sharply at vein 4, then parallel and near to outer line, followed by a similar parallel line, the interval between them filled up with olive scales; submarginal line acutely dentate, white with dark edges, the teeth, except at costa, filled up with olive scales, like the shade following the outer line; marginal area whitish, containing a single dentiform mark on hindmargin beyond the cell; marginal line velvety black, interrupted at the veins and swollen between them; fringe white, with an olive dividing line.

Hindwing: with a curved black mark at base; an olive cloud from inner margin touching postmedian line to the end of cell; the rest as in forewing.

Underside smoky fuscous, the marginal borders broadly blackish; apex of forewing and fringes of both wings white.

Head, thorax, and abdomen white, the last with the base of segments on dorsom fuscous, and with a black ring at base; tips of patagia and palpi externally black.

Expanse of wings: 30 mm.

1 7 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

## 234. Cleora gracilis spec. nov.

Forewing: pale grey dusted with darker in basal two-thirds; the lines blackish, very fine; costa with five dark linear blotches, indicating their origin, at one-fifth, one-third, three-fifths, two-thirds, and five-sixths respectively; the lines outcurved above, then oblique inwards, the third (exterior) angulated beyond cell; median area between first and third darker grey; cell-mark lunate, with dark edge; submarginal line waved, parallel to hindmargin; the preceding space paler; an oblique dark shade from below apex; a submarginal row of distinct dark round spots; marginal line fine, black; fringe grey.

Hindwing: with a dark fine nearly straight line at two-thirds; the basal space within it dark grey, containing the obscure lunate cell-mark; the rest as

in forewing.

Underside glossy pale grey, washed in basal area with darker; cell-spots blackish, obscure; a dark apical cloud on forewing, enclosing a small whitish apical patch.

Head, thorax, and abdomen pale grey; the vertex white.

Expanse of wings: 30 mm.

1 ? from Jamaica.

The apex of forewing is slightly acute; the antennae with the segments angular.

### 235. Cymatophora dislocata spec. nov.

Forewing: pale ochreous, with slight greenish tinge, speckled with brownish; the costa striated with brown; the lines dark olive-brown; first from one-fourth of costa to nearly one-third of inner margin, outcurved above and below median vein, double; median shade obscure, from a costal spot just before middle to inner margin at two-fifths, passing just in front of the black cell-spot; onter line from three-fourths of costa, lunnlate-dentate, to middle of inner margin, followed closely below costa and above inner margin by a dark olive-brown shade; submarginal line interrupted, preceded at costa by a brown line concave outwards to vein 6, by two lunules filled up with brown and followed by a subquadrate brown patch, beyond cell, and by traces of lunules below it; a slight dark blotch beyond it at anal angle; an apical pale blotch; fringe concolorous.

Hindwing: with nearly straight double antemedian and postmedian olivebrown lines, slight curved submarginal shade, and black cell-spot.

Underside much speckled, and with all the lines diffusely marked; marginal area beyond outer line, except apical blotch, more or less filled with fuseous shades.

Head, thorax, and abdomen like wings; upper half of face and palpi fuscoustinged.

Expanse of wings: 52 mm.

1 3 from Peru.

Very much like *commotaria* Mssn., but ochreous not grey in ground colour; the lines all in slightly different places, nearer the hindmargin; apical pale blotch more conspicuous; submarginal line below costa concave outwards, not straight, as in *commotaria*.

## 236. Cymatophora muscosa spec. nov.

Forewing: dull olive-grey-brown, thickly powdered with dark atoms, rendering the markings indistinct; costal edge paler, with numerons short black streaks; first line from costa at two-fifths, bent on the subcostal vein, then vertical to one-third of inner margin; outer line at two-thirds, dentate-lunulate, parallel to hindmargin, followed by a deeper shade; submarginal line half-way between outer line and hindmargin, interrupted and marked by dark blotches between the veins, those beyond cell and on submedian fold being plainest; obscure dark marginal spots; fringe concolorons; cell-spot blackish.

Hindwing: rather paler; postmedian line nearly straight, followed by a darker shade; submarginal very obscure; cell-spot black.

Underside duller, with the markings very obscure; a darker submarginal shade.

Face and third segment of palpi pale ochreons; rest of palpi fuscous; vertex and thorax like forewings; the tips of the shoulders dark; abdomen rather paler.

Expanse of wings: 43 mm.

1 ? from Ecnador.

### 237. Hymenomima carneata spec. nov.

Forewing: whitish, suffused throughout with pale flesh-colour, slightly black-speckled; the costa with short black striae; the lines velvety black, strongly marked; first from one-fourth of costa, obliquely curved inwards to near base of inner margin, thickened at the veins; outer line from three-fifths of costa to about middle of inner margin, sinuous, marked with thick black teeth on the veins, followed by a shade darker than the ground colour; a median line from a black spot on costa, outcurved and touching the black cell-spot, obsolete below the middle; submarginal line whitish, irregularly lumulate, the lumiles marked internally by black scales, which beyond cell and at costa form black blotches; black marginal spots connected by black dashes with the outer teeth of submarginal line; fringe flesh-colour.

Hindwing: with a black line at base and a diffuse curved blackish antemedian shade from inner margin to subcostal vein, followed by a large black cell-spot; the rest as in forewing.

Underside of forewing smoky fuscous, the outer margin smoky blackish, the inner margin whitish; costa ochreous, with black spots and striae; cell-spot black and large. Hindwing whitish, with only a dark cell-spot.

Thorax and abdomen flesh-colour, the latter with a black ring at base; head pale, mixed with flesh-colour; shoulders white, tipped with black; palpiblack externally.

Expanse of wings: 38 mm.

4 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

Distinguished by the coloration and the blackness of the markings.

## 238. Hymenomima rufata spec. nov.

Forewing: whitish, thickly speckled and suffused with reddish brown; the lines red-brown, thick and well-marked, the inner and outer lines geminate; basal line from one-fourth of costa, angled outwards on subcostal vein, then oblique inwards, twice curved, to near base of inner margin, there joined by a similar line nearer base; median line bluntly bent in cell beyond the reddish cell-spot, then oblique, irregularly dentate, to two-fifths of inner margin; outer line from two-thirds of costa to three-fifths of inner margin, lumulate-dentate, more or less parallel to hindmargin, followed by a slightly duller red line; submarginal line whitish, zigzag, preceded by a reddish brown shade and followed by a less distinct one, except between veins 3 and 4, where there is a paler space; marginal line finely black, interrupted at the veins, connected by black dashes with the teeth of the submarginal line; fringe reddish ochreous, mottled with darker beyond the veins, which are themselves rufous; costal edge marked with dense reddish and pale striae.

Hindwing: paler, being only striated, not suffused, with rufous; a dark line at base; a straight reddish antemedian line continuing the median of forewings: a blackish cell-spot; the rest as in forewing.

Underside rufous grey, faintly speckled; both wings with median and outer lines, the latter very strongly dark-dotted on the veins; both cell-spots distinct; costa of forewing with dense dark striations; marginal area of forewing dark fuscons, with a still darker central cloud; hindwing with slight submarginal

cloud, the whole wing paler; fringe pale ochreous with concise reddish dashes beyond veins.

Head, thorax, and abdomen grey, mottled with reddish, the abdomen paler; a thick red-brown ring on basal segment, edged with paler; anal tuft ochreous. Expanse of wings: 35—40 mm.

5 & ♂ from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

### 239. Hymenomima schisticolor spec. nov.

Forewing: pale slate-colour, without speckling; the lines and veins dark slate-colour; a dark spot at base of cell; first line at one-sixth, bent in cell, then oblique, touching the fovea; second, antemedian, at one-third, bent in cell and touching the large triangular cell-spot, then sinuous inwards; outer line from three-fifths of costa, angled on veins 6 and 4, and dentate on the veins, strongly sinuous throughout, to middle of inner margin, followed by a similar but much finer line; submarginal line pale, dentate, between two dark slate-coloured shades, of which the inner one is the darker and somewhat interrupted; marginal spots between the veins black; fringe concolorous.

Hindwing: similar, but without first line.

Underside pale cloudy slate-colour, with dark cell-spots; the marginal borders darker, in the forewing broad.

Head, thorax, and abdomen pale slate-colour; the vertex, thorax, and shoulders whiter; a pair of dark spots on thorax, one on each of the patagia, and one in centre of face above; palpi externally blackish.

Expanse of wings: 26 mm.

 $1\ \delta$  from Santo Domingo, Carabaya, S.E. Peru, November 1901, wet season (Ockenden).

Vein 5 from a little below 6.

### 240. Iridopsis candidata spee. nov.

Forewing: white, slightly speckled with dark grey or blackish; basal and marginal areas washed with pale chestnut; the lines black, starting from black costal spots; first at one-fourth, nearly straight, blacker on the veins; median from before middle of costa to before middle of inner margin, waved and partly interrupted, marked by black dashes on veins, and touching the cell-spot, which is large and oval, black-edged, filled up by semi-erect bluish white scales; above it is a small round black spot above the base of vein 6; outer line at two-thirds, marked only by black vein-spots; submarginal line black, thick, lunate, followed between veins 4 and 7 by a large black blotch touching hindmargin; a row of black marginal spots, not quite touching margin; the brown suffusion is very faint between veins 3 and 4, leaving there a square white patch with the fringe white beyond it, the rest of the fringe being brown, chequered with blackish.

Hindwing: with a dark line at base; a slight grey interrupted antemedian and postmedian line, darker at the veins, and a cloudy blackish submarginal line; large black marginal spots between the veins not quite touching margin, and smaller spots on the margin at the vein-ends; the ends of veins 4 and 6 marked with brown; fringe white, chequered with blackish.

Underside glossy white, the costa of forewing ochreous, with a few dark

striae; a black costal spot near middle touching the large black cell-spot; a broad marginal black border enclosing a white spot from vein 4 to below 3; fringe white at apex and below middle, blackish from 4 to 7. Hindwing with narrower black border from apex to vein 4, continued to anal angle as a sub-marginal shade.

Face and palpi dark fuscons above, whitish below; vertex white, with a black spot in middle; shoulders and patagia white, with the apical half fuscons; the tips of the patagia chestnut-brown; thorax mixed light and dark; abdomen white, the basal segment with two black spots, the second with a broad black ring; anal tufts ochreous, with a blackish fleck at base on dorsum; abdomen beneath white; legs broken.

Expanse of wings: 46 mm.

1 of from Salampioni, Bolivia, 800 m., August 1901, dry season (Simons).

Quite distinct from validaria Guen., with which at first sight it might be confused.

## Iridopsis schistacea spec. nov.

Forewing: slaty grey, minutely black-speckled; costa with fine black striae; lines fine, black; first at one-fourth of costa, slightly bent in cell, then vertical, preceded by a chestnut brown shade, edged inwardly with darker; outer line from three-fourths of costa, irregularly crenulate, angled below vein 6, then obliquely waved inwards, followed by a chestnut shade; submarginal line very faintly marked, preceded by a biangulate black blotch between veins 4 and 6; cell-spot large, occiloid, edged with black, with traces of a fine irregularly crenulate median line, also double, curved round it, and approximated to, or touching, outer line on inner margin; marginal spots round, black; fringe concolorous.

Hindwing: with a straight black antemedian line, followed by a chestnut shade; outer line angled acutely below vein 6, followed by a chestnut shade: cell-spot occlloid; marginal black spots connected by a fine marginal festoon.

Underside of the 3 paler, of the 4 darker, more speckled; large dark cell-spots in both wings; forewing with upper part of outer line and a subapical dark cloud.

Head, thorax, and abdomen concolorous.

Expanse of wings: 38-40 mm.

7 さる, 1 ♀, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

The single ? is darker than any of the &&.

# Melanoscia gen. nov.

Forewing: costa straight, curved slightly at base and apex; apex somewhat produced; hindmargin oblique, slightly curved; inner margin convex.

Hindwing: narrow; hindmargin curved, faintly bent at vein 4.

Antennae of 3 and 2 bipectinate; palpi stout, slightly upcurved; tongue and frenulum present; hindtibiae large, with pencil of hairs and four spurs; forewing with a foveal space below median vein, covered below by a plate of pale scales.

Neuration: forewing, cell longer than half of wing; discocellular vertically concave; first median at one-half, second at five-sixths; radials normal; 7, 8 stalked from before end of cell; 9, 10, 11 stalked, 9 anastomosing with 8: hindwing, with 3 and 7 both before angles of cell.

Type: Melanoscia felina spec. nov.

### 242. Melanoscia albimacula spec. nov.

Forewing: blackish green, varied with large and small white spots; the costa striated with white; the large spots are six in number, all more or less round; three in the submedian interval, near base, below the origin of vein 2, and on hindmargin; two more on the hindmargin, at apex, and between veins 3 and 4; the sixth, the largest of all, immediately beyond the discocellular. In the cell is a smaller triangular spot. The smaller spots, also round, follow the course of the usual lines, and are placed between the veins, 3 beyond the basal spot, representing inner line; 8 forming a sinuous line passing beyond the large discal spot, and 3 submarginal; a few smaller irregular white marks occur in different parts, especially along inner margin; fringe white, marked darker above and below middle; discocellular mark linear, blackish.

Hindwing: with basal two-thirds white, with dusky striae, which are darker and denser below median vein; cell-spot black; a broad black marginal border with a large white spot at apex and anal angle and smaller one between.

Underside like upper, but duller.

Head and thorax greenish fuscous; tips of patagia white; abdomen dark, mixed with whitish.

Expanse of wings: 50 mm.

2 & f from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

### 243. Melanoscia felina spec. nov.

Forewing: olive-ochreous, speckled with blackish green, and more or less obliterated by the dark blackish green suffusion; basal area blackish green, containing a velvety dark blotch at base of costa, and another below the median yein, and edged by an obscurely double humlate line, the outer edge being nearly vertical; this is followed by a vertical white space, running across cell from subcostal vein to inner margin, generally narrow throughout, but in one example much broader below the middle; beyond it the cell is occupied by a large oblong velvety black blotch, including the discocellular mark, followed by a square white blotch between veins 4 and 6; outer line sinuous, dentate-lunulate, from two-thirds of costa to middle of inner margin, running outwards and bounding the white blotch to vein 4, then incurved; this line is broader below the middle, is edged ontwardly with whitish or othreous, and is preceded below middle by another dark lumlate line; marginal area filled up with dark, traversed by a paler submarginal line, often very obscure, preceded by deeper blotches, and sometimes marked by ochreous or whitish spots, in all cases ending in a whitish, tadpole-shaped, apical blotch; all the veins are ochrous, and in the paler examples the space between veins 3 and 4 remains olive ochroous; fringe dark, white at apex, and with an ochroous patch at anal angle.

Hindwing: mottled, smoky grey, with a dark cell-spot, a dark postmedian line, and two broad, partially coalescent, submarginal shades; the fringe white. In the 2 the basal half of hindwing is white, speekled, and at base and along costa suffused with smoky grey, followed by a broad blackish marginal border.

Underside duller, the dark markings all blurred, the white blotches distinct. Head, antennae, centre of shoulders, thorax, and abdomen yellow ochreous; sides of shoulders, the patagia, the palpi and legs externally blackish green.

Expanse of wings: 3, 37 mm., 2, 39 mm.

3 & ♂, 1 ♀, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

### 244. Melanoscia occlusa spec. nov.

Closely resembling *M. felina*, but much darker, all the paler spaces being reduced or obscured; in particular the square white discal blotch becomes a mere white line, followed immediately by the sinuous outer line; the apical spot is much narrower; in one example the median vein is deep yellow throughout.

Hindwing: wholly smoky black, with deeper cell-spot and broad marginal

border.

Underside wholly dark and dull, with the white markings as above.

Head, thorax, and abdomen blackish green, only the collar deep yellow.

Expanse of wings: 3, 37 mm.

3 && from Santo Domingo, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

The species seems really distinct from felina.

### Neofidonia gen. nov.

Forewing: broad; costa straight, convex at apex only; hindmargin rounded.

Hindwing: broad; hindmargin well rounded, with slight indentation beyond cell.

Antennae of 3 bipectinated, the pectinations short and regular; palpi short, porrect, the second segment broad, third minute; forehead protuberant; tongue and frenulum well developed; hindtibiae thickened, with four spurs and a pencil of hairs.

Neuration: forewing, cell half as long as wing, discocellular oblique; first median nervule at one-half, second at five-sixths; radials normal; 7, 8, 9 stalked from shortly before end of cell; 10 and 11 coincident throughout. Hindwing, 6 and 7 from upper end of cell.

Type: Neofidonia nigristigma spec. nov. Characterised by the broader, shorter wings.

### 245. Neofidonia nigristigma spec. nov.

Forewing: whitish, thickly covered with smoky grey striae, and towards onter margin suffused with fuseous; costa white or yellowish, with fine regular black striae and three black spots at the commencement of the lines; first at one-fourth, obscurely marked, except by black dashes on the veins; outer at nearly two-thirds, slightly enryed ontwards, also marked by black teeth on the veins, and followed by a paler line; median shortly before onter line, very indistinet; discal mark oblong, thick and velvety black, extending the whole length of the discocellular; submarginal line dentate-lumulate, pale grey or whitish, preceded by a darker tinge in the lumules, the tooth between veins 3 and 4 connected with hindmargin by a whitish dash; marginal spots black; fringe fuseons with paler mottling between the veins; veins towards the margin ferruginous.

Hindwing: white, with pale grey striations; cell-spot small, black, placed in a greyer curved fascia, edged by the antemedian and postmedian lines, which are marked by black dashes on the veins, those on vein 1 more largely developed; postmedian line followed by a pale space; submarginal line pale, indistinct and interrupted, with darker specklings on both sides; marginal spots black; fringe mottled pale and dark grey.

Underside white; forewing with broad black margin narrowing to anal angle; hindwing with only a few marginal striae; costa of forewing yellowish with black spots; forewing with large black cell-mark as on upperside. Hindwing with a narrow linear one; fringe of forewing dark with white mottlings below middle; of hindwing whitish with dark markings.

Head, thorax, and abdomen whitish, the last marked with grey along dorsnin.

Expanse of wings: 40 mm.

2 33 from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., December 1901, wet season (Ockenden).

## 246. Stenalcidia fumibrunnea spec. nov.

Forewing: smoky fuscous, with a brownish tinge; the lines blackish; first curved from one-fourth of costa to near base of inner margin, preceded by a dark shade; median from middle of costa to before middle of inner margin, strongly bent out beyond the obscure black cell-spot; outer line from before three-fourths of costa, angled inwards below subcostal vein and outwards on vein 6, then curved inwards and approaching middle line at inner margin, followed by a dark shade; submarginal line waved, whitish, distinct; shallow black marginal lumules between the veins connected by dark streaks with the apex of lumules of the submarginal line; fringe chequered.

Hindwing: without basal line; the submarginal less conspicuous.

Underside much paler, without dusting; median and outer lines of both wings and the cell-spots black; outer line of forewing followed by a brownish cloud.

Head, thorax, and abdomen like wings.

Expanse of wings: 30 mm.

1 & from San Ernesto, Bolivia, 1000 m., August, September 1900 (Simons).

# 247. Stenalcidia guttata spec. nov.

Forewing: white, dusted in places with black scales; all the markings black; two large black costal spots near base, from the first of which starts a curved blackish cloud and from the second a curved line of black spots to below the foven near base of inner margin; a black costal spot at middle from which a median series of vein-spots runs to before middle of inner margin; a double black costal spot at three-fourths, from the first of which a sinuous row of black vein-spots starts, and from the second an equally sinuous black line; a row of large oval black submarginal spots between the veins, followed by a marginal series of large round spots, these spots becoming coalescent and forming black blotches at apex and anal angle; fringe white with black chequerings; cell-spot black.

Hindwing: similar, but the basal and median lines only expressed below

the median vein; no black blotches in marginal area.

Underside of forewing smoky grey, of hindwing whitish; cell-spots and marginal spots present; costa of forewing with black spots and striae.

Face, palpi, and antennae black; vertex and shoulders white; thorax and abdomen white with pairs of black spots, the latter also with black scales except on anal segment.

Expanse of wings: 32 mm.

1 & from Chulumani, Bolivia, 2000 m., January 1901, wet season (Simons).

# 248. Stenalcidia latimedia spec. nov.

Forewing: white, with very fine greenish grey striations; costa greyer, with dark grey striae; inner and outer lines fine, concisely black; inner from one-sixth of costa, excurved above and below median vein, to inner margin near base; onter from two-thirds of costa, running outwards to vein 4, with a small angle on vein 6, then bluntly bent at right angles, and running inwards, forming a large sinus in submedian interspace and an outward angle on vein 1; a small dark grey cell-spot; above it a dark grey oblique median line rises from costa and is continued as a very fine lumulate reddish thread to inner margin, almost touching outer line at the sinus; marginal area suffused with flesh-coloured grey, containing a series of clongate black blotches edged and tipped with white, representing the submarginal line, and a row of large black marginal spots, not quite touching the margin; fringe pinky white.

Hindwing: with the median line thick and dark, sinnous, preceded by a cloud of fuscous and reddish or olive striae; cell-spot blackish, outside the median line; outer half of wing as in forewing, but the postmedian line

followed by a rufous fuscous shade.

Underside of forewing dark cloudy grey with broad dull smoky blackish marginal border; fringe and extreme hindmargin dull grey, showing dark marginal spots. Hindwing paler, dull grey with slight submarginal apical cloud; cell-spots on both wings.

Head, thorax, and abdomen whitish, like wings; anal half of dorsum tinged with fuscous; face white with a black bar above and below; palpi externally black, the apical segment whitish.

Expanse of wings: 32 mm.

4 & d from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

A very distinct species, superficially recalling Bryoptera.

# 249. Tephronia (?) novella spec. nov.

Forewing: pale dusty grey, without markings, except traces of two oblique lines from beyond middle of inner margin towards apex; cell-spot minute; a fine black marginal line, forming dots between the veins; fringe pale.

Hindwing: paler; cell-spot distinct; traces of the lines only at hindmargin. Underside of forewing darker; both wings dusted with grey scales.

Head, thorax, and abdomen concolorons; abdomen with a double row of

blackish dorsal spots.

Expanse of wings: 26 mm.

1 & from Eenador.

The species is placed provisionally in the Old-World genus Tephronia.

#### SUBFAMILY SCOTOPTERYGINAE.

# 250. Catascia haydenata ab. obliterata nov.

Larger than the type form of haydenata Pack., and without any dark grey and fuscous shading, the ground colour being pale stone-colour with light olive-grey speckling; the lines obscure; the costal edge alone dark grey.

1 & from Glenwood Springs, Colorado (Oslar), accompanied by two of the

ordinary dark form.

#### SUBFAMILY SELIDOSEMINAE.

### 251. Callipseustes strigosa spec. nov.

Forewing: white, tinged with pale olive and thickly striated with black; basal area filled up with olive; central fascia darker olive, edged with black; inner edge from nearly one-third of costa to beyond one-third of inner margin, indented both above and below median vein; onter edge from beyond middle of costa to beyond middle of inner margin, forming an acute ontward tooth on vein 6 and a blunter one on vein 4, then lumulate: a smaller dark cell-spot in the fascia; the outer edge is followed, as the inner is preceded, by a white line; submarginal line obscure, forming some white separate spots below costa, two black spots above and below vein 4, and a broad pale olive band to inner margin, preceded by a sinuous brownish olive cloud; fringe olive.

Hindwing: whitish, tinged with olive and striated with darker, a dark grey line just beyond middle, slightly waved, and an indistinct submarginal

shade.

Underside whitish, densely striated with olive and fuscous; outer line in both wings marked by dark dots on veins.

Head and thorax pale olive ochreous; abdomen greyer.

Expanse of wings: 24 mm.

3 && from Charaplaya, Bolivia, 1300 m., June 1901 (Simons).

### 252. Callipseustes subsignata spec. nov.

Forewing: olive, with a few dark striations; the markings brownish olive; costa with fine dark streaks; a broad central fascia, the inner edge from one-fourth of costa to beyond one-third of inner margin, indented in cell, the outer from beyond middle of costa to two-thirds of inner margin, lnnulate between the veins and forming a projecting tooth on vein 4, filled up with brownish; darker along the edges and paler in middle, containing an obscure linear black cell-spot; the basal area and a band beyond the fascia of the olive ground colour; submarginal line pale olive, irregular and interrupted above, forming an ontward lunule on vein 3, then broad and vertical to just before anal angle, the olive shades on each side either striated or blotched with blackish; a distinct black blotch between veins 3 and 4 running out into the fringe, which is olive irregularly spotted with black.

Hindwing: paler and greyer; a postmedian straight crenulated line, paler

edged externally; a dark cell-spot; fringe shining olive-grey.

Underside greyish olive, much striated; outer lines in both wings marked by black spots on veins; outer edge of central fascia of forewing marked by an othreous yellow spot beyond cell, sometimes continued to inner margin.

Head, thorax, and abdomen olive.

Expanse of wings: 28 mm.

2 33 from Charaplaya, Bolivia, 1300 m., June 1901 (Simons).

## 253. Ischnopteris abnormipalpis spec. nov.

Forewing: ochreous white, in some examples hardly showing at all, in others only along the course of the three lines and beyond the middle of inner margin; first line oblique from about one-sixth of costa to one-third of inner margin, shortly angled on subcostal vein and submedian fold; second line

from beyond middle of costa to beyond middle of inner margin, nearly vertical, or slightly ontbent at middle, in the single  $\mathfrak P$  distinctly angled on vein 4; submarginal line irregularly waved, angled inwards below costa and interrupted between veins 3 and 4; central area olive-brown; basal area the same, but generally more mixed with paler scales, the subcostal, median and submedian veins sometimes showing pale across them; submarginal line preceded by a dark irregular shade, interrupted between 3 and 4, and of varying intensity, generally forming a dark blotch on costa and at inner margin; in the two male examples the white is fringed with yellowish ochrons thickly speckled and striated with fuscous; in the  $\mathfrak P$  the onter area of central fascia and the streak interrupting the submarginal line between veins 3 and 4 is dull reddish; in all cases the upper half of marginal area is darker than the lower; a series of black marginal triangles between the veins; fringe dark green or fuscous, with slender dashes of paler, varying in colour according to the tint of the ground colour; cell-spot black, indistinct.

Hindwing: fuscous cinereous, with a paler curved submarginal band preceded by a dark curved line, the darker hindmargin with a pale marginal blotch between veins 2 and 4; fringe in the ? rufous-tinged, in the two dd yellowish otherous.

Underside duller, but with all the dark and pale markings indicated.

Head, thorax, and base of abdomen dark olive fuscous, rest of abdomen cinereous, the tufts darker; abdomen beneath and legs cinereous, the tarsi spotted dark and light.

Expanse of wings: 30 mm.

2 & d, 1 &, from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November and December 1901, wet season (Ockenden).

In character of markings, shape of wings and body, and all points of structure except the palpi, this species is a true *Ischnopteris*; the palpi, however, have the terminal segment of unusual length and slenderness, and agree in this particular with the genus *Mimoprora* hereafter described.

## 254. Ischnopteris albiguttata spec. nov.

3. Forewing: moss-green and pinkish grey, mixed with fuscous and thickly black-speckled, the veins rather paler; the inner and double median lines very obscure, disposed and shaped as in chloroclystata Guen., of which it may be a local form. Beyond the onter arm of the median line, which bounds it inwardly, a large white blotch reaches from costa, where it is narrower, to the median vein; on its outer edge lies the black cell-mark, the whitish marked submarginal line is preceded on costa by a diffuse whitish patch; the margin of the wing before the fringe is very pale green and pinkish grey, in one instance mixed with whitish scales.

Hindwing and underside of both wings exactly as in chloroclystata Guen.

Expanse of wings: 52 mm.

2 && from Santo Domingo, Carabaya, Peru, 6000 ft., November 1901, wet season (Ockenden).

# 255. Ischnopteris fidelis spec. nov.

The description of *I. abnormipalpis*, given above, applies almost exactly to this species also; the points of difference are the following: the ground colour

is pure white with a bluish tint; the outer half of forewing is tinged with olive-green instead of ochrons, this tint filling up the space between veins 3 and 4 and interrupting the submarginal line; the dark internal edging of the submarginal line on inner margin is more pronounced, and is preceded by a pure white blotch; the inner line, though of the same shape as in abnormipalpis, is lost in the dark olive-fuscous suffusion which extends from base to outer line. The hindwing is much darker, with the paler markings hardly perceptible, and the fringe is also dark. Except for the short depressed terminal joint of the palpi, which is that of a true Ischnopteris, there is very little to distinguish this species from I. abnormipalpis.

## 256. Ischnopteris fulminea.

Chloroclysta fulminea Doga, Ann. S. E. Belg, xlv. p. 310. ♀ (1901).

After describing this insect from 2 ? ?, Dognin goes on to say that it has a great resemblance to *Chloroclysta fulgurata* Warr. 3, and that an example of this last is in the Berlin Museum (Maassen Collection) marked *Syrtodes phacgopterata*. The insect marked *Ischnopteris fulgurata* in the British Museum Collection has never been described, nor, as far as I know, has the example marked *phacgopterata* in the Berlin Museum.

Among a large collection of Geometrids from Peru, lately received, is a pair from the same locality and with the same date, of which the  $\mathfrak P$  agrees with the description of fulminea by Dognin, while the  $\mathfrak F$  is evidently the same as those named fulgurata and phaegopterata, but not described. The difference in markings notwithstanding, I must consider them to belong to the same species, which will stand as Ischnopteris fulminea Dogn.

A detailed description of the 3 is here appended for comparison.

Forewing: olive-green, striated with blackish; the costa pinkish with dark striations; the median vein and its branches pale green finely edged with creamcolour, the median vein at base, and a streak on inner margin before middle bright pink; a black dash beneath the median at base, edged with pale beneath; from costa at one-sixth an oblique cream-coloured line, running along median vein above and joining on the discocellular a similar line from middle of costa, the projecting pointed continuation of the two containing a velvety black narrow dash; an oblique cream-coloured line from costa just before apex emits a short line basewards above vein 6, and is slightly dentate externally; below the median vein it is continued to inner margin, where it is semicircularly curved round basewards, meeting the first costal line at a sharp angle on the median; from the median to inner margin it is edged externally first by a moss-green line and then by a peach-blossom-coloured one; on each side of the median vein in the marginal field is a broad cream-coloured streak, the upper straight and abbreviated, the lower curving into the tooth at vein 3; marginal lunules velvety black, preceded above middle by cream-coloured lunnles edged with pinky scales, and below middle by peach-blossom-coloured lunules, this tint also being mixed with the green towards anal angle and forming a pale line across the lower half of the marginal field; fringe olive-green, paler at base, with cream-coloured dashes beyond the principal veins.

Hindwing: olive-grey at base, with a dark green curved postmedian line, beyond which the wing becomes pink-tinged with green speckles, the apex itself

being pale yellow; fringe pale yellow from apex to vein 4, then rufous brown with some black marginal scales between veins 2 and 4; cell-spot olive-green.

Underside pinkish ochreous, green-tinged in places; forewing speekled along costa and towards hindmargin, with a dusky central transverse bar, and a large pale ochreous patch. Hindwing thickly black-speekled, these speekles forming two indistinct curved shades beyond the middle; apex ochreous.

Palpi ochreous, greenish externally; face ochreous, with a green middle line; vertex ochreous with a dark spot; shoulders dark green, internally ochreous; patagia dark and light green, with some white-tipped lateral tufts; thorax with reddish-grey tufts; abdomen reddish grey with the tufts greenish; anal tufts bright ochreous; legs pinkish ochreous mottled with dark green.

Expanse of wings: 56 mm.

Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

This d is in perfect condition; the 2 taken at the same time with it is much wasted.

## 257. Ischnopteris oppositata spec. nov.

Forewing: a mixture of dull moss-green and purplish, speckled with darker, the markings darker, blackish purple or green; first line oblique from about one-eighth of costa to nearly one-third of inner margin, pale green on an ochreons ground, marked with pink on the median vein, dentate outwards on the veins and submedian fold; outer line pale pink and green, from three-fifths of costa to three-fourths of inner margin, irregularly waved, slightly oblique outwards above, bulged in middle, and insinuate on submedian fold; the central space, like the basal, dark, crossed by numerous blackish striae and darkest towards edges; discal spot elongated, touching the onter line, black; the median vein with its three branches pink; in the marginal area a black subquadrate costal blotch, edged with pale green, reaching vein 6; on the inner margin an elongated black blotch, similarly edged, nearly reaching vein 4; a smaller black blotch between the two; a series of black marginal lunules; fringe greenish fuscous with a pale line at base.

Hindwing: dirty whitish, greyer towards hindmargin; the cell-mark, an irregularly deutate-crenulate postmedian line, and a broad cloudy submarginal band dark grey; dark marginal lunules before the fringe which is dull pink, like the ends of the veins.

Underside ochreous stained with reddish and coarsely mottled with greenish fuscous; forewing with costa reddish; basal half of wing washed with dull greenish; with a dark oblique middle bar and diffuse submarginal cloud. Hindwing much brighter; cell-spots and marginal lunules on both wings; hindwing with slight submarginal shade; all the veins reddish.

Head dull reddish and fuscous; thorax and patagia blackish green; abdomen cinereous, the dorsal tufts reddish; legs reddish, thickly mottled with greenish fuscous.

Expanse of wings: 52 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

In the forewing vein 10 is not stalked with 7, 8, 9, but rises just before them, anastomosing at a point with 11, and again at a point with 8, 9.

### 258. Oenoptila costata spec. nov.

Forewing: dark ferriginous, with a few black speekles; costa paler, more yellowish, with dark striae; below the subcostal vein a silvery white streak runs from base to apex, emitting from its lower edge a sharp white point along veins 6 and 7; the ferruginous basal area forms a triangle edged outwardly by a straight oblique line from three-fourths of costa to three-fifths of inner margin, dark above the subcostal streak, whitish below it; followed by a pale lilacine space edged outwardly by a fine black white-edged sinnous line, forming rounded teeth between the veins; this line is succeeded above the median vein by a bright ferruginous long oval space, edged externally with a dark cloud, and with a small yellow dot below vein 7; marginal space a mixture of ferruginous and lilacine; fringe ferruginous; there are traces of a cloudy dark basal line, marked by pale dots on the veins.

Hindwing: basal half deep ferruginous, onter half towards apex brighter and paler, towards and angle greyer and striated with black; a straight median whitish line, followed by an obscure lilacine space edged above with whitish; submarginal line marked by small dark blotches between the veins towards apex and anal angle.

Underside much paler, dull pinkish ochreous with grey mottlings; the markings

of the upperside showing through.

Head, apical half of patagia, metathorax, and basal half of abdomen deep ferruginons; shoulders and basal half of patagia pale yellow; prothorax whitish; rest of abdomen grey.

Expanse of wings: 40 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

# 259. Oenoptila filata spec. nov.

Forewing: pale snuff-colour, tinged and striated with olive; the lines very obscure; first enrved, near base, marked only by pale spots on veins, faintly mixed with red; outer line from inner margin just beyond middle, where only it is distinct, fine and blood-red, forming a curve outwards from vein 1 to 2, marked with red dots on veins followed by pale ones; an indistinct submarginal olive-grey shade; a small dark cell-spot; fringe concolorous.

Hindwing: with the thin red line waved and median, just beyond the small

cell-spot.

Underside pale lilac ochreous; forewing with a diffuse olive-fuscous submarginal cloud mixed with ferruginous, from costa to below middle, the apex whitish; hindwing with the cloud very faint; both wings with distinct dark brown cell-spot.

Head, thorax, and dorsum snuff-colour; shoulders bright pale yellow, tipped with orange red; anal tuft of abdomen pale ochreous.

Expanse of wings: 30 mm.

1 3 from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

In forewing veins 7, 8, 9 are stalked from the bend in subcostal; 10 and 11 coincident anastomose with 12 before separating.

## 260. Oenoptila leprosata spec. nov.

Forewing: brick-red covered with transverse dark striae; the costal edge blackish; lines marked by blackish, white-tipped dashes on veins; the first curved,

near base, accompanied by a broad dark red shade; the second near hindmargin, sinuous and parallel to margin in middle, the spot on vein 2 displaced basewards, above vein 6 forked and thickened, marked by pale scales; a large dark red cell-spot; fringe brick-red; at the end of each vein a few whitish scales.

Hindwing: darker and without any basal line, otherwise like forewing; the

fringe of inner margin ochreous.

Underside ochraceous, marked with blackish striae, along hindmargin brownish red; costa of forewing with dark striae, thickened towards base; inner margin whitish; inner line thick; outer line marked as above; a whitish grey apical blotch; cell-spot large, brown; fringe dark brown with whitish scales along base; hindwing like forewing, the whitish scales on margin more developed.

Head, thorax, and abdomen above brick-red; abdomen beneath and anal tuft

ochreous.

In the ? the spots on vein 1 in both lines and those forming the subapical fork are enlarged into blotches of grey scales, and the costal edge remains red; the hindmargin of forewing is faintly elbowed at vein 4 and concave above, the apex appearing subfalcate, while in the 3 the hindmargin is simply oblique, hardly curved, the apex rounded.

Expanse of wings: 32 mm.

1 3,2 99, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November, December 1901, wet season (Ockenden).

Neuration of forewings the same as in O. filata.

# 261. Oenoptila prunicolor spec. nov.

Forewing: rich plum-colour, towards end of cell fiery red; a broad grey costal streak from base to apex, its lower edge more leaden grey, the costal edge streaked with black, and with some ferruginous marks; at three-fourths of the wing, from vein 7 to vein 4, is an ear-shaped yellow blotch, marked with fiery orange scales, edged inwardly by a sinuous snow-white line, along which the blotch is marked with deep ferruginous: it is followed below vein 7 by a largish yellow spot marked with fiery orange; anal angle tinged with fulvous yellow; fringe plum-colour.

Hindwing: with basal area deep ferruginous; the anal area and an irregularly sinuous, ontwardly white-edged, median band plum-colour; apical area and an antemedian fascia deep yellow, speckled with black and tinged with fulvous; a round dark cell-spot; along the dark median fascia are yellow spots between the veins; dark submarginal blotches between the veins above middle, that beyond cell joined to the plum-coloured anal area.

Underside dull grey and yellowish, the grey predominating in the forewing and the yellow in the hindwing, the dark markings showing through from above.

Head, metathorax, tips of patagia, and base of abdomen deep ferruginous; rest of abdomen lilac-grey; collar, shoulders, base of patagia, and front of thorax grey.

Expanse of wings: 54 mm.

1 9 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., January 1902, wet season (Ockenden).

A remarkably handsome insect; notwithstanding its striking superficial difference, the points of resemblance are so great that I shall not be surprised

if it proves to be the other sex of  $\Omega e$ . costata described above. On the other hand the neuration differs much. In the  $\delta$  costata the subcostal vein is abruptly bent inwards before end, veins 10, 7, 8, 9, are stalked from the bend, rising in the order named, 10 anastomoses with 11 and again with 8, 9, the costal portions of 11, 10, 9, curve off abruptly at origin; the discocellular is slightly oblique inwards.

In the ? prunicolor veins 7, 10, 8, 9, are stalked together from the bend in subcostal, but rise in this different order, all running oblique and straight, and 10 does not anastomose at all.

## 262. Petelia anagogaria spec. nov.

Forewing: reddish brown, with obscurely marked darker striae; the costa dark fuscous; the lines obscure, slightly darker; first nearly straight, from one-fourth of costa to one-third of inner margin, marked by darker vein-spots tipped towards the base with grey; median shade somewhat curved outwards, from middle of costa to quite two-thirds of inner margin; outer line from three-fourths of costa, also outcurved and towards middle approaching hindmargin, reaching inner margin close beyond median shade, marked by black spots outwardly tipped with grey; fringe concolorous; cell-spot black, obscured by the median shade.

Hindwing: similar, but without basal line.

Underside paler, dull brick-red, the darker striae restricted to the costal and hindmargins.

Head, thorax, and abdomen dull reddish brown; underside of abdomen and legs pale cinereous.

Expanse of wings: 38 mm.

1 & from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., May 1902, dry season (Ockenden).

Agrees with Petelia in neuration, though somewhat unlike in facies.

# 263. Petelia binigrata spec. nov.

Forewing: reddish wood-brown, finely striated with darker; the lines very fine, thread-like, paler, the inner edged outwardly, and the outer inwardly with darker, forming slight dots on the veins; first line from one-third of costa to one-sixth of inner margin; outer line from two-thirds of costa to four-fifths of inner margin, waved and bent outwards in the middle; a waved red-brown vertical central shade, preceding the black cell-spot; a large somewhat cruciform black blotch at apex and a small one at base; fringe concolorous; no marginal line.

Hindwing: with a black basal line; the outer pale line nearer the margin; no apical blotch.

Underside dull pinkish ochreous, sparsely speckled, chiefly along hindmargin; a small black blotch at costa before apex of forewing; cell-spots black.

Head, thorax, and basal segment of abdomen black; collar and abdomen like wings.

Expanse of wings: 30 mm.

1 &, 5 ♀♀, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

The single  $\delta$  is without the rich red tint of the  $\Im$ .

### 264. Petelia purpurea spec. nov.

Forewing: pinkish ochreons, towards costa and hindmargin tinged with dull fulvons; basal and marginal areas deep plum-colonr, formed of coalescent striae; lines undefined; first near base, indicated by a fulvons spot on costa and dark spots on veins; a thick shade curving obliquely inwards before the middle; in the paler central area is a black cell-spot, followed by an outer line marked by black spots on the veins, outwardly bent at veins 3 and 4, before which bend the ground colour is olive-brown; fringe plum-colour.

Hindwing: with the basal area narrowly plum-coloured, the outer margin fulvous-tinged, with plum-coloured striac only at apex, and a few towards anal angle; fringe fulvous.

Underside duller; both wings with diffuse plum-coloured marginal clouds.

Head, thorax, and dorsum plnm-coloured; rest of abdomen and anal segment above ochreous.

Expanse of wings: 30 mm.

1 9 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

### Prostoma gen. nov.

Forewing: costa faintly curved; hindmargin irregularly excised from vein 7 to 4, the sinus from 4 to 6 deeper; vertical from apex to 7 and forming a blunt projection between 4 and 3, then oblique and concave to anal angle, which is well marked.

Hindwing: with hindmargin deeply crenulate, especially beyond cell.

Forehead with a strong pointed peak of hairs below; palpi porrect, decumbent, twice as long as head, flattened, rough-haired above and below, the terminal segment acute; antennae simple (?); tongue and frenulum present, but weak.

Neuration: forewing, cell quite half of wing; discocellular vertical; first median nervule at about one-half, second close before third; radials normal; 7, 8, 9, stalked from some distance before end of cell; 10, 11 free; hindwing with costal and subcostal approximated for half cell, 7 just before end; no radial; medians as in forewing; all the veins slender and weak.

Type: Prostoma fragilis spec. nov.

# 265. Prostoma fragilis spec. nov.

Forewing: white, thickly striated throughout with fuscous, except along the course of outer line, where the white ground is slightly more conspicuous; the lines dark; first at one-third, forming a curve above and below the median; outer line from two-thirds of costa to four-fifths of inner margin, concave outwards and oblique to vein 6, there angled, outcurved and crenulate to vein 2, forming a sinus inwards to vein 1 and there dentate outwards; a cloudy darker fuscous submarginal shade, forming a blotch below vein 6; cell-spot black, distinct; marginal line blackish, interrupted at veins; fringe fuscous grey, with a paler line at base.

Hindwing: whiter, without basal line.

Underside similar to upper, the basal half of both wings darker; the blotch in submarginal line of forewing below vein 6 conspicuously dark.

Head, thorax, and abdomen pale grey, with fuscous speckling.

Expanse of wings: 27 mm.

1 9 from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

## Genus Syrtodes Guen., Phal. ii. p. 451.

Guenée, when introducing the genus Syrtodes, divided it into three groups, the first of which, containing his species cythereata only, he suggested would ultimately have to form a separate genus. The species must either be rare or overlooked; it is not represented in the British Museum collection, nor, as far as I know, is there a specimen in the Tring Museum. A single & in perfect condition from Mons. Dognin's collection, which I have lately examined, proves that Guenée was right. As the species included in his second and third groups all belong to the genus Ischnopteris of Hübner, his own name Syrtodes may be retained for the first species thereunder mentioned; but his description, made in the main from the insects of the other groups, requires rewriting.

Forewing: elongate; costa nearly straight, slightly curved at base and apex; apex rectangular; hindmargin curved below, smooth, not crenulate.

Hindwing: narrow, with hindmargin curved, and both angles rounded.

Forehead protuberant; palpi quite short, not reaching beyond face, roughhaired beneath, the third segment hidden; antenuae thick, lamellate; tongue and frenulum present; abdomen with very small dorsal tufts; hindtibiae not thickened, with four spurs; legs long and slender.

Forewing with fovea covered by broad scales.

Neuration: forewing, cell more than half the length of wing; discocellular vertical, very weak; first median nervule at two-thirds, second well before third; lower radial stalked with upper from top end of cell; 10, 7, 8, 9, stalked from two-thirds; 11 free, but approximated to 12; hindwing, costal and subcostal approximated for half of cell; 7 well before end; no radial.

The uncrenulated hindmargin of wings, protuberant forehead, and the fovea of forewing will separate it at once from *Ischnopteris*, while the abnormal stalking of veins 5 and 6 of forewing distinguishes it from all other genera of the subfamily.

# 266. Thysanopyga fulvifascia spec. nov.

Forewing: tawny grey, thickly striated with fuscous; lines indistinct; one near base wavy; a submarginal shade parallel to hindmargin formed of aggregated striations, preceded by a broad tawny band, which is distinct only above the middle; a dark blotch in end of cell; a tawny blotch at apex; fringe fuscous, with a pale basal line beyond a blackish marginal line; traces of a minute pale cell-spot.

Hindwing: wholly tawny, striated thickly in basal and marginal areas; the broad tawny band complete; cell-spot small, whitish.

Underside cream-white; both wings with broad dark fuscous border.

Head and shoulders brownish grey; patagia apparently pale grey; abdomen wanting; antennae black, with basal joint and shaft whitish.

Expanse of wings: 28 mm.

1 ♂ from Bulim, Ecuador, December 1900—February 1901, 160 ft. (Flemming & Miketta).

The neuration of forewing is abnormal; I1 is stalked with 7, 10, 8, 9, the stalk rising far back, 11 anastomoses with 12, and 10 does not separate till near costa. Is it a form of oroanda Druce?

# 267. Thysanopyga suffecta spec. nov.

Forewing: brownish ochreous, wholly suffused and varied with close dark fuscous striae, the two lines dull flesh-colonr; first straight and vertical, close to base; the outer from just before anal angle, also vertical and straight till near costa, where it is slightly curved outwards and scarcely attains the costa; the fuscons tint is rather deeper beyond the inner and before the outer line; cell-spot black; fringe concolorous; a few whitish scales before apex, forming a small blotch between veins 5 and 6.

Hindwing: with small white cell-spot beyond a cloudy dark spot, which appears to form part of an inner line; a diffuse dull flesh-coloured curved band towards hindmargin, broader towards costa.

Underside duller, greyish fuscous, striated with darker, with a slight dark submarginal cloud.

Head, thorax, and abdomen concolorous with wings.

Expanse of wings: 35 mm.

1 & from Chalumani, Bolivia, 2000 m., January 1901, wet season (Simons). Nearest to T. ochrilinea Warr. from Jamaica, described as a possible aberration of pygaria Gnea., but which I now recognise as being quite distinct. In that species the costa of forewing is broadly flesh-colour.

## SUBFAMILY FIDONIINAE.

# 268. Cabira lignicolor spec. nov.

Forewing: yellowish ochrous, thickly covered with dull wood-brown striations, which coalescing suffuse nearly the whole wing, leaving only the costal area and an irregular patch above inner margin beyond outer line of the paler ground colour; the lines obscure, marked by dark white-tipped spots on the veins; first curved, at one-fourth; seeond from costa shortly before apex to just beyond middle of inner margin, twice concave outwards, from vein 7 to 4 and from 4 to 1; a black cell-spot, and small black dots at ends of the veins; fringe concolorous.

Hindwing: with the base and hindmargin thickly suffused with brown, the central field paler, with thick brown striations; the rest as in forewing.

Underside greyish ochreons, darker in forewing.

Head and palpi externally brown; shoulders pale ochreons, like the costal streak; thorax and abdomen above brown.

In the ? the dark suffusion is less and the markings plainer; a curved brown shade accompanies the inner line from the subcostal vein and a broad brown shade precedes the outer line, the space between them being ochreous tinged with fulvous and striated with dark; beyond the outer line on inner margin the pale ground colour forms a large unspeckled blotch below median vein, becoming fulvous-tinged towards hindmargin and thickly striated with brown. In the hindwing also the central yellowish area is more developed. Underneath the outer line of forewing is well defined, limiting a darker space within it.

Expanse of wings: d, 28 mm.; \,\foata, 32 mm.

A pair from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).

In both wings the hindmargin is faintly elbowed at vein 4.

Spilocraspeda umbrilinea Schaus, described from a ? only, must be allied to this insect.

#### SUBFAMILY SEMIOTHISINAE.

## Peribolodes gen. nov.

Forewing: short and broad; costa straight, slightly indented beyond middle, abruptly and shortly depressed at apex, which is blunt; hindmargin sinuous, shortly insinuate beneath apex, then strongly gibbous; anal angle well marked; inner margin straight.

Hindwing: triangular; the three margins equal; inner margin incurved; hindmargin nearly straight.

Palpi short, porrect, rough-scaled; the terminal segment hidden; tongue and frenulum present; antennae (?) simple, filiform (abdomen and hindlegs wanting).

Neuration: forewing, cell two-fifths of wing; discocellular vertical; first median nervule at one-half, second at five-sixths; radials normal; 7, 8, 9 stalked from before end; 10 and 11 coincident, far back, anastomosing with 12, subsequently approximating to, but not touching 8, 9; hindwing, costal shortly approximated to subcostal beyond base; 6, 7 from upper end of cell; no radial; medians as in forewing.

Type: Peribolodes bicolorata spec. nov.

## 269. Peribolodes bicolorata spec. nov.

Forewing: dark brown, along the margins purplish brown; costa with minute white dots; lines deeper brown; first obliquely curved inwards from one-third of costa to near base of inner margin; second straight from three-fourths of costa to before middle of inner margin; third from a little beyond second, nearly parallel but faintly waved; two whitish curved submarginal lines, parallel to each other below subcostal; space between second and third lines above vein 7 dotted with bluish white; a fine dark marginal line; fringe brown, more rufous towards apex.

Hindwing: with all the lines parallel to hindmargin, the outer submarginal whiter; no basal line; fringe rufous.

Underside pale chestnut brown; costa of forewing finely striated with black; the whole wing with scattered grey striations; two thick oblique transverse lines, antemedian and postmedian, the latter followed by a shade; two black submarginal blotches, one at apex, the other at anal angle; marginal line black, interrupted at the veins; fringe chestnut: hindwing with four thick dark lines and a cell-spot.

Head and thorax dark purplish brown; face and palpi dotted with chestnut; (abdomen wanting).

Expanse of wings: 19 mm.

1 9 from Bartica, British Guiana.

#### 270. Semiothisa indentata spec. nov.

J. Forewing: whitish ochreous, finely speckled with grey and fuscous; the lines black, all thickened into spots on costa; first at one-fifth, slightly curved; onter from two-thirds of costa to four-fifths of inner margin, irregularly sinuate, indented in cell, and forming two conspicuous black spots on veins 4 and 3; median shade hardly visible, but marked on costa by a black blotch; a brown shade follows outer line, broad on costa; marginal dashes brown and indistinct, black-brown and distinct before the excision; fringe concolorous, with a brown dividing line, brown in the excision; cell-spot hardly marked.

Hindwings: with antemedian and postmedian lines grey and obscure, the

latter prominently indented in cell, the shade beyond it paler brown.

Underside with distinct black cell-spots; the outer shade distinctly marked, deep chestnut brown, the inner lines marked also with chestnut; marginal area of forewing yellowish-tinged, the veins yellowish; apex of forewing white.

Head, thorax, and abdomen like wings. Antennae with short fascicles of

cilia.

? tinged with pale brown, the lines dark brown; only the two spots black. Underside washed throughout with ferruginous.

Expanse of wings: 39 mm.

1 &, 1 &, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

### 271. Semiothisa intensata spec. nov.

Allied to S. cardinea Druce, but very much darker, the whole forewing being brown-black; in markings of the forewing it differs in three points; the basal line is farther from the base, and consequently closely approaches the middle line on inner margin; the outer dentate line, instead of running obliquely outwards to vein 6 and there forming an acute angle, is deflected at vein 7 and forms a quite blunt angle at 6; lastly the paler marginal space is much narrower beyond the submarginal line, which is simply curved throughout, not angled in the middle. In the hindwing the basal third is as dark as the forewing, the rest of the wing being dull brown.

Underside very deep yellow in forewing: all the markings and striae brownblack and strongly expressed.

Expanse of wings: 32 mm.

I of from Marcapata, E. Peru (4500 ft.).

# 272. Semiothisa nigricomma spec. nov.

Forewing: white, semi-transparent, thickly sprinkled with grey striae; the base and costal area grey-tinged; the lines grey, thick, darker at costa; first at one-fifth, angled on subcostal vein, then straight; second just before middle, outcurved round the thick vertical cell-spot; outer line at three-fourths, parallel to hindmargin, slightly bent outwards at vein 6, and inwards on submedian vein, rising from a black comma-shaped costal blotch; marginal area dark grey, the submarginal line scarcely traceable; fringe grey, whitish along base; costal edge pale, with fine dark striae.

Hindwing: with basal two-thirds whitish; no basal line; cell-spot large and distinct; the rest as in forewing.

Underside like upper, but whiter, less grey; costa of forewing and veins of both wings yellow-tinged.

Head, thorax, and abdomen grey.

Expanse of wings: 28 mm.

1 & from Guadalajara.

### SUBFAMILY ENNOMINAE.

# 273. Aeschropteryx flexilinea spec. nov.

Forewing: dull lilac-grey, tinged faintly with olive, with fine dark striae; first line at one-third, strongly curved outwards in cell, slightly so below median, followed by a small dark cell-spot; outer line brownish olive, edged externally with pale lilac, containing whitish dashes on veins, from just beyond middle of inner margin, curving towards apex, before which it is angled and shortly retracted to costa; marginal area filled with olive striae; fringe olive, below middle tipped with lilac-grey.

Hindwing: with the line antemedian; outer half of wing suffused with olive and containing an irregular darker zigzag submarginal shade; fringe brownish olive; from apex to middle the extreme margin before fringe lilac whitish, with

brown specks; the tail pointed, not bluntly squared.

Underside stone-grey, washed with olive, with faint dark speekling; cell-spots black, minute; fringe brownish olive; a slightly darker cloud at hindmargin of

forewing beyond cell.

Face and vertex dark olive-grey, the latter and the antennae finely edged with whitish; shoulders, patagia, thorax, and abdomen pale lilac-grey tinged with olive, especially the shoulders and dorsum; hindtibiae pale speckled with grey; forelegs dark grey spotted with pale.

Expanse of wings: 50 mm.

1 & from Huatuxco, Vera Cruz.

# 274. Aeschropteryx olivata spec. nov.

Like Ae. incaudata Guen. in the contour of hindwing, but smaller and darker, more olive-tinged, especially in the marginal areas beyond the outer lines; the costa of forewing is nearly straight throughout instead of being arched; its hindmargin more bowed; the shoulders and patagia are darker, olive-grey.

Expanse of wings: 48 mm.

The insect I identify as incaudata expands 56-60 mm.

1 & from Huatuxeo, Vera Cruz.

# 275. Aeschropteryx tetragonata ab. parvidens nov.

Like the type form of tetragonata Guen. in general appearance, though paler, more ochreous, in ground colour: but the hindmargin of hindwing forms at vein 4 a small sharp tooth instead of a bluntly rounded tail. In forewing the retracted portion of the oblique outer line is very slightly marked, shorter than in the type form, reaching costa nearer apex, and therefore the angle between the two portions is more obtuse. In both wings the oblique line reaches the inner margin farther from the base than in tetragonata.

2 dd from Sapucay, Villa Rica, Paragnay, September 1901 (Foster).

Received along with 2 33 of the type form.

## 276. Anisoperas adulta spec. nov.

Forewing: deep purplish grey, with darker striae mixed with pale grey scales; the lines deeper; first from one-third of costa to one-third of inner margin, faintly ontcurved; outer line from beyond three-fourths of costa to quite two-thirds of inner margin, bisinuate, bluntly projecting at veins 7 and 4, incurved between; an undefined median shade near before outer line; a zigzag submarginal line, sometimes obscured; cell-spot black; fringe concolorous.

Hindwing: without basal line; the postmedian line dentate on veins, and there marked with pale dashes.

Underside paler, duller grey; cell-spots and outer line marked in both wings, the line not corresponding with that of the upperside.

Head, thorax, and abdomen concolorous with wings.

Expanse of wings: 48 mm.

1 9 from Colombia.

## 277. Anisoperas? aurantiaca spec. nov.

Forewing: dull yellowish ochreous, suffused and freckled with ferruginous grey; costal area duller, olive-ochreous with short dark striae; basal line diffuse, outcurved below costa, the basal area more or less filled up with darker; on costa before apex a semi-oval pale blotch, edged with whitish and then with fuscous scales; from it start two lines, the inner ferruginous, lunulate, oblique to beyond middle of inner margin closely followed by a belt of olive-grey scales; the other line is submarginal, diffuse and irregularly waved to anal angle; fringe concolorous, with two fine grey lines; cell-spot black, followed by an indistinct ferruginous median shade, often very nearly obsolete.

Hindwing: the same, but without first line.

Underside duller, with the markings darker; apex of forewing pale grey.

Head, thorax, and abdomen like wings.

Expanse of wings: 40 mm.

4 9 9: 3 from Salidero, 1 from Bulim, N.W. Ecuador, January and February 1901 (Flemming & Miketta).

I believe these to belong to Anisoperas; but in the absence of the  $\delta$  their position is not certain.

# 278. Anisoperas latibrunnea spec. nov.

Forewing: dull reddish brown in the central area, more greyish brown in basal and marginal fields; first line from one-fourth of costa to one-fourth of inner margin, finely black, as finely edged internally with whitish, nearly straight; outer line from three-fourths of costa to close before anal angle on inner margin, straight but slightly waved in its upper conrse, fine and black, followed by a white line distinct at costa, then another black and a dull ochreous grey line; submarginal line very obscure, zigzag, plainest at costa, above anal angle touching the ochreous line; a black blotch along vein 4 from outer line to angle; cell-spot linear, black with a pale line down it. The whole surface is freekled with fuscous; the costa with dark vertical striae and pale interspaces; fringe reddish grey.

Hindwing: dark grey tinged with brown to outer line at four-fifths; this line fuscous, edged with white, crenulate above middle, straight below; marginal area paler grey, but dark at the margin itself; fringe grey; cell-spot brown.

Underside dark olive-grey, freekled with fuscous, the ground colour ochreous before the dark cell-spot; outer line marked by black spots on veins; hindwing similar.

Head and thorax brownish fuscous; abdomen cinereous.

Expanse of wings: 29 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).

## Apicia Guen.

In Nov. Zool. i. p. 457 (1894) I proposed to adopt the name Eusarca Hüb. for the species of Guenée's genera Apicia and Caberodes; I do not now justify this step; certainly not as a substitute for Apicia, which seems fairly separable from Caberodes.

## 279. Apicia fractilineata.

Eusarca fractilineata Warr., Nov. Zool. ii. p. 141 (1895).

The species was described from a  $\mathcal{J}$  from Colombia. The ? I find differs from the  $\mathcal{J}$  as much as the sexes of *vibicaria* Cram. from each other. The specimen now described came from Santo Domingo, Carabaya, S.E. Peru, along with three typical  $\mathcal{J}\mathcal{J}$ , dated November 1901. Ground colour olive-green with a yellower tinge than in the  $\mathcal{J}\mathcal{J}$ , thickly covered with dark striations; basal patch of forewings, and a broad fascia beyond outer line of both wings, dull brick-red, the outer line marked on veins with white dashes; beyond the submarginal line, which is obsence, the marginal area becomes olive-green, like the fringe.

Underside deep dull yellow, mixed in the forewing towards hindmargin with orange fulvous; markings as in the 3. The antennae have the joints angular, laterally produced, on the inside into short spines, on the outside into pedicellate fascicles of cilia.

The shape of the wing agrees with the ? of vibicaria Cram.

Expanse of wings: 42 mm.

In many points this ? satisfies the description of A. incopularia Guen., which has been hitherto sunk as a synonym of juncturaria Guen.; should it eventually prove to be identical, Guenée's name would stand; I mention it here for the purpose of drawing attention to the resemblance.

## 280. Apicia subfasciata ab. obscurata nov.

Forewing: clouded over with purplish grey flecked with hoary grey; no trace of the usual yellow ground colour visible except at extreme apex on costa, and in the disc between the two lines; the lines, the edge of the discal spot, and the fringe deep olive-brown.

Hindwing: with the yellow of the ground colour somewhat more visible, especially along costal area; the fringe olive-fulvous; fringe of inner margin yellow.

Underside like typical subfasciata Warr., but very bright yellow; the inner margin of forewing shining sating white.

Head, thorax, and abdomen purplish grey, the shoulders and patagia densely and finely dusted with hoary grey; dorsal segments of abdomen darker, with flecks of white scales; anal segments above and the whole nuderneath and sides bright yellow.

1 & from Hnatuxco, Vera Cruz.

A remarkable extreme development of the aberration macularia Warr.

## Apiciopsis gen. nov.

Forewing: elongate, narrow; costa straight, faintly curved at base and apex; apex produced; hindmargin strongly angled at vein 4, the margin above the angle slightly concave, below it straight and oblique.

Hindwing: with apex well rounded; anal angle bluntly rectangular, the margin from it to vein 4 straight.

Abdomen of & long, with long anal tufts; antennae thick, lamellate, subserrate; palpi porrect, the second segment large, heavily scaled, the third smooth, decumbent, short; forehead protuberant; tongue and frenulum present; coxae of all the legs (apparently) tufted; hindtibia with four spurs.

Neuration: forewing, cell three-fifths of wing; discocellular vertical, concave; first median nervule just beyond middle, second at seven-eighths; radials normal; 7, 8 stalked from the bend in subcostal, 9 and the stalk of 10, 11 each some distance before; 10 and 11 coincidently anastomosing with 12, and 9 anastomosing with 10, 11, subsequently again with 8: hindwing, costal and subcostal approximating for half of cell; 7 from before angle.

In the forewing of 3 the submedian vein is swollen at base, then bent down; above the submedian fold the wing membrane is contorted and depressed, forming an irregular fovea.

Type: Apiciopsis obliquaria spec. nov.

## 281. Apiciopsis angusta spec. nov.

Forewing: pale straw-colour, with rather coarse brownish freckles; costa yellower, with finer dark dusting; first line very fine, oblique outwards from one-third of inner margin towards the black cell-spot; outer line pale brown, thick, darker-edged outwardly, and followed by a fine white line from middle of inner margin into apex, there preceded by a dark spot; a faint brownish submarginal waved shade; extreme margin brownish-tinged; fringe worn.

Hindwing: with cell-spot, and beyond it a sinnous pale brown line parallel to hindmargin, and a brown patch at anal angle.

Underside paler, with the lines faint.

Head, thorax, and abdomen pale ochreous; vertex whiter.

Expanse of wings: 30 mm.

1 & from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

Forewing narrow and elongate; the angle at vein 4 prominent and the apex acute, even in the 3. A much more fragile-looking insect than the type species.

# 282. Apiciopsis obliquaria spec. nov.

Forewing: pale ochreous, thinly dark-speckled; inner line, obscurely marked, from one-third of inner margin straight and oblique to middle of cell just before discal spot, which is black and distinct; outer line very distinct, dark olive-brown, from apex to three-fifths of inner margin, closely followed by two grey lumulate-dentate lines, of which the inner one is marked by black vein-dots; an indistinct submarginal slightly waved grey cloud; fringe narrow, concolorous, with a dark dot at vein 4.

Hindwing: with outer and submarginal lines slightly sinuous; the apex clouded with fuscous grey; fringe with slight grey spots beyond veins.

Underside browner ochreous; the outer lines thicker.

Head, thorax, and abdomen like wings; palpi externally and upper half of face brownish.

Expanse of wings: 40 mm.

1 & from Charaplaya, Bolivia, 1300 m., June 1901 (Simons), type; 1 & Chulumani, Bolivia, 2000 m., December, wet season (Simons). In the latter specimen, which is much worn, the outer line is thin and inconspicuous.

The insect is something like Loxapicia parallelaria Warr. (Eusarca).

### 283. Asestra ustularia spec. nov.

Forewing: dull ochraceous, speckled with blackish, deeper-tinted towards base and apex; costa dotted with black; the lines black at costa, below marked by black spots on veins; first at one-third, bent on subcostal vein, then vertical; onter at five-sixths, angled at vein 6, and more bluntly at vein 4, the black dots tipped with pale; cell-spot black; fringe concolorous.

Hindwing: dirty white, grey-speckled, and flushed with ochreons towards

hindmargin; a dark cell-spot and submarginal line of dark dots.

Underside similar, but paler.

Head and thorax like forewing; abdomen paler.

Expanse of wings: 30 mm.

1 3 from Chulumani, Bolivia, 2000 m., January 1901, wet season (Simons).

Very much like A. albitumida Warr. from Loja, but without the white terminal blotches of that species.

## 284. Azelina nigra spec. nov.

Forewing: rufous grey striated with darker grey or brownish; this ground colour, however, appears only in the onter third of the wing, being entirely suffused elsewhere with dull dark leaden purple, which becomes velvety purple-black within the edges of the central fascia; first line from one-fourth of costa to one-third of inner margin, forming three somewhat angled projections, of which the middle one below the median voin is more acute than the other two; the line is edged at costa by whitish scales, and preceded on inner margin below submedian vein by a patch of flesh-coloured scales; outer line from three-fourths of costa to three-fourths of inner margin, forming three acute small teeth below costa and three bluntly rounded projections above inner margin, with a large deep sinus between veins 2 and 5; on the costa it is followed by a distinct white spot; apical region purple-black, concisely edged inwardly by an oblique line from the white costal spot to the angle at vein 3; the paler marginal space is irregularly blackened at anal angle, and the brown-grey striae tend to form two irregular clouds; submarginal spots black and white, showing wholly white in the dark spaces; cell-spot slightly elongate, white; costa varied with slight oblique pale dashes, and the whole wing sparsely dusted with pale scales.

Hindwing: wholly dull blackish; an outer waved paler line from a little before apex to above anal angle, where it is edged outwardly with a blotch of flesh-coloured ochreous; submarginal spot below vein 7, and that at anal angle white, the rest black with white edges; fringe of both wings blackish, except on lower half of forewing.

Underside dull dirty blackish with a brown tinge; cell-spots of both wings and

costal spot of forewing whitish; an outer crenulate darker line edged with paler, followed by a white patch at anal angle of hindwing; a pale patch on hindmargin of forewing below middle.

Head, thorax, and abdomen concolorons with hindwing; anal tufts pale; legs dotted with whitish.

Expanse of wings: 48 mm.

3 & from Chimate, Bolivia, 760 m., September 1900 (Simons).

Allied to A. jimenezaria Dogn. and constrictifascia Warr., but distinguished by the much darker coloration.

## 285. Azelina ochriscripta spec. nov.

Forewing: ashy grey; the basal area darkened with dense purplish-grey strigac; the central area suffused as well as striated with purplish grey, and along inner margin with vinous; the outer area with sparse dark striac; first line indistinct above median, below it forming two slight curves to inner margin at quite one-third; onter line oblique and reddish from costa at three-fourths to vein 6, then rounded between the veins and purplish grey to three-fourths of inner margin, followed by four or five irregular blackish spots between the veins; costal portion of central fascia occupied by an outwardly bilobed semi-oval blotch of fulvous ochreons unspotted, edged with red-brown, the lower lobe followed by a semi-hyaline white crescent on the discocellular; some black, white-tipped, submarginal dots; fringe reddish.

Hindwing: brownish grey, paler along costa; a nearly straight pale grey line at three-fourths; anal area paler grey with black speckles; submarginal spots and fringe as in the forewing.

Underside of forewing dark olive-grey above the median, pale grey below and at apex; the white crescent preceded by a dull orange streak in cell; the costal area reddish; outer line black and waved from costa to vein 4: hindwing tinged with vinous and black-speckled; cell-spot black; the line black-dotted and edged with paler.

Head, thorax, and abdomen purplish grey; legs pale ochreous.

Expanse of wings: 35 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).

# Brachyctenistis gen. nov.

Allied to Certima Wlk. and more closely still to Neodora Warr., separated, from both by the antennae of the 3, which are armed with short stiff pectinations, gradually decreasing to the serrate apex. Palpi obliquely porrect upwards, first and second segments rough-haired, third smooth and pointed, bent forward. Hindmargin of both wings rounded and crenulate; forewing without fovea; abdomen without crests.

Type: Brachyctenistis undilinea spec. nov.

To this genus must be transferred the species described by me (Nov. Zool. vii. p. 216) as Hasodima? incongruata, to which the type species undilinea is in reality closely related.

## 286. Brachyctenistis undilinea spec. nov.

Forewing: chalk-white, thickly striated with olive-grey; the costa with dark grey striations and three black spots at the origin of the lines; first line at one-third, eurved outwards on each side of the median vein, marked also by black vein-spots; outer at two-thirds, lunulate-dentate, sinuous, outcurved above middle, incurved helow; submarginal line, like outer, but less defined, the teeth black-tipped on the veins, approaching outer line towards inner margin; beyond it yet another thick grey subterminal line; marginal line crenulate, black; fringe white; cell-spot olive-grey; a grey blotch between veins 2 and 3 beyond outer line.

Hindwing: white, dusted with grey striae along hind and inner margins, with the three outer grey lines indicated on inner margin before anal angle; the postmedian not reaching above vein 5, the submarginal marked throughout by grey spots on veins, the subterminal an obscure shade; a round black cell-spot; fringe and marginal line as in forewing.

Underside white; costa of forewing with black striae and spots; cell-spot dark grey; an oblique blackish smear from costa beyond outer line to middle of hindmargin. Hindwing with black cell-spot and a blackish oval submarginal blotch between veins 6 and 7.

Palpi white, the second segment blackish; face white with a black bar above; vertex, shoulders, and patagia greyish white, the tips of patagia white; thorax and abdomen white, the latter grey-tinged between the segmental rings; pectus pure white; legs whitish, spotted with dark; antennae dark, with the base white.

Expanse of wings: 44 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

## Brachystichia gen. nov.

In shape and marking of wings like Apicia Guen., but with different palpi, face, and antennae; the face below ends in a cone of scales; the palpi are much longer than in Apicia, the second segment thickly scaled, the third deflexed; the antennae of the 3 are armed with two rows of short curved pedicellate fascicles of cilia instead of being bipectinated.

The spurs of the hindtibia are short and stumpy.

Type: B. nitida, spec. nov.

# 287. Brachystichia nitida spec. nov.

Forewing: very pale fawn-colour, flushed with deeper, and with a few brown specklings; costal edge deep brown; cell-spot black; the two lines very faint, but marked by slight dark dots on veins; the first at one-third; the second from two-thirds of inner margin towards apex, hardly sinnous, shortly retracted to costa from vein 7 and marked with a small black-brown blotch on each side of the curve, with a small spot beyond them on costa; traces of a zigzag submarginal line; fringe rather darker but glossy like the wing.

Hindwing: with the line central, grey, not bearing spots; cell-spot small; hindmargin deeper fawn like the fringe.

Underside pearl grey, coarsely brown-speckled, the forewing suffused with

olive fulvous except along hind and inner margin; the outer and submarginal lines plain, black-brown, the apical blotches forming a small dark triangle.

Head, thorax, and abdomen like wings; outside of palpi, tip of the frontal cone, collar, and base of shoulders brown.

Expanse of wings: 38 mm.

I & from Sapucay, near Villa Rica, Paraguay, June 1901 (Foster).

### 288. Caripeta interalbicans spec. nov.

Forewing: pale yellowish ochreons, mostly overlaid with rusty salmon-colour and reddish orange; these darker tints run along the veins leaving the intervals pale; costal edge finely ochreous; irregular ochreous streaks along the two folds and inner margin, mixed with a few coarse dark scales; a central fascia somewhat darker, edged by diffuse brown lines; first line from one-third of costa, angled ontwards on median vein, incurved on submedian fold, and again oblique outwards to before middle of inner margin; outer line from four-fifths of costa, oblique inwards and forming a deep sinus beyond cell, a beak outwards between veins 4 and 3, and another deep sinus on submedian fold, to four-fifths of inner margin; cell-spot dark brown below, ochreous above, followed by a dark brownish shade; the reddish horizontal marks on the veins narrow towards hindmargin and the pale intervals correspondingly wider; the fringe yellow ochreous with grey patches beyond veins; traces of a submarginal line of elongated lunules from close before apex, marked by a few olive scales, those between veins 2 and 3, and 3 and 4, slightly filled up with olive.

Hindwing: whitish ochreous at base, beyond middle flushed with orange, deeper along the veins, and wholly orange along hindmargin; a few olive scales towards base and along inner margin, and a slight cell-spot; fringe pale ochreous.

Underside whitish ochreous; costa of both wings, hindmargins, and ends of veins sandy-yellow; veins towards margin marked by pinkish grey wedge-shaped marks; the dark edges of central fascia showing through on forewing; the hindwing with a dull grey wavy postmedian line and cell-spot.

Head and thorax ochreous, the shoulders and patagia somewhat yellower; abdomen cinereous.

Expanse of wings: 44 mm.

1 9 from South Park, Colorado, August 1901 (Oslar).

Whether this represents a distinct species, or is only another of many variable forms of aretaria Wlk., must be left till many more examples are available for comparison than exist at present. None of the forms seem to be really common.

## 289. Certima canisparsa spec. nov.

Forewing: reddish testaceous, thickly striated with fuscons, these striate encroaching on the white costal edge; a brown curved shade at one-third, more or less mixed with whitish scales, and slightly darker marked on the veins; exterior line of black spots tipped with white and below the middle accompanied by a band of white scales, preceded by a straight brown oblique line parallel to hindmargin, and becoming obsolete at vein 6; fringe reddish; cell-spot black.

Hindwing: without first line.

Underside whitish, washed with pale brown, thickly black-speckled; a sub-marginal reddish-fuscous cloud from costa to below middle, much broader in forewing; a fine black marginal line; fringe rufous.

Face and palpi red-brown; vertex and thorax rnfous; abdomen pale grey, rufous-tinged on dorsum.

Expanse of wings: 48 mm.

2 & & from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

Like *C. unicolor* Dogn. but more striated, less uniform in colour, the white costal edge not pure; the oblique line nearer analangle on inner margin and median, not antemedian, on hindwing. Underside of forewing without white patch beyond cell.

### 290. Certima delectans spec. nov.

Forewing: deep yellow, with a few scattered dark scales; inner line marked only by slight red-brown dots on veins; from two-thirds of inner margin to just below apex a sinnous band of contiguous rust-red lunnles slightly mixed with fuscous scales beyond cell and in submedian interval, its inner edge diffuse, its outer more defined; the teeth on the veins marked by small white dashes, which themselves reach the costa; marginal area beyond the band tinged with dull olive, deepening into fuscous brown along margin, mottled with grey and black scales; marginal line dark brown; fringe grey with thick brown middle line; cell-spot small, black.

Hindwing: with the band nearer and parallel to hindmargin, less prominent; the rest as in forewing.

Underside duller yellow, slightly speckled; both wings with fuscous greytinged margin beyond the outer line of dark specks; forewing with a diffuse brown shade before the marginal one, reaching to midwing; cell-spots black.

Face and palpi brown; abdomen like wings; vertex, thorax, and patagia pale follows vellow.

Expanse of wings: 44 mm.

1 & from Chulumani, Bolivia, 2000 m., January 1901, wet season (Simons).

A handsome insect, the brightest-coloured of the genus.

## 291. Certima nubifera spec. nov.

Very near C. dositheata Gnen., but without any bend in the hindmargin of forewing; the scaling finer, more glossy; the outer line nearer hindmargin, the median below middle not running straight to inner margin and touching outer line, but bent inwards parallel to it, the space between them from vein 4 to submedian fold filled up with dark. In the hindwing the median and exterior line are parallel throughout, not divergent from inner margin.

Expanse of wings: 46 mm.

2 & & from Charaplaya, Bolivia, 1200 m., June and July 1901 (Simons).

## 292. Certima pallidifrons spec. nov.

Forewing: in colour like dositheata Guen.; the lines also marked by black dots on veins, but these not tipped with white as in that species; the marginal area somewhat darker than median, the limiting line sinuous, from three-fourths of costa parallel to hindmargin as far as vein 3, then curving basewards and reaching inner margin before middle, the edge below the median forming a slight brownish cloud; cell-spot black; hindmargin with a slight but plain elbow at vein 4; fringe concolorous.

Hindwing: with slightly darker central shade; the black dots of outer fine on a darker shade and farther from margin than in dositheata.

Underside paler; with cell-spots and outer line of dots; a smoky fuscous submarginal cloud on forewing reaching vein 2.

Thorax and abdomen like wings; palpi brownish; face entirely pale ochreous, almost white.

Expanse of wings: 33 mm.

1 of from Salampioni, Bolivia, 800 m., August 1901, dry season (Simons). Distinguished by its small size and white face.

### 293. Cimicodes latata Guen., Phal. i. p. 50. ?

I have always been under the impression that the three forms pallicostata, nigroliturata, and latata, described as distinct by Guenée, belonged to one and the same species, latata being the  $\mathfrak{P}$ . But among ten specimens, all  $\mathfrak{F}\mathfrak{F}$ , caught at the same time and place, three belong to the typical pallicostata and two to nigroliturata, these two forms being distinguishable from all the others by the much paler, stone-grey, underside; three more represent a form closely allied to subapicata Warr., but distinct from it and described below as new; the remaining two, both  $\mathfrak{F}\mathfrak{F}$ , correspond to Guenée's description of latata. In these the forewing is very decidedly longer and narrower than in any other form, and the cell-spot of forewing is surrounded by a distinct pale ring; but the distinguishing characteristic is the position of the transverse line of the hindwing; in all other species I have seen this precedes the cell-spot; in the two specimens I identify as latata this line, much less distinct, as not being edged with ochreons, passes ontside the cell-spot. All the examples are labelled San Ernesto, Bolivia, 1000 m., Angust and September 1900 (Simons).

### 294. Cimicodes ruptimacula spec. nov.

Forewing: olive grey-brown or rufons grey-brown, very thickly sprinkled with dark dots and striae; costal streak not paler than ground colour, but without any tinge of brown; the lines almost exactly as in C. subapicata Warr., both concave outwards and parallel to each other; the outer line is marked with pale dots on all the veins; the white spot on vein 7 is elongated and confluent with the white costal spot, so forming an irregular pale blotch; there is no dark shade beyond the lower half of submarginal line, but instead two blackish blotches beyond outer line on each side of vein 3, representing the large black blotch of nigroliturata.

Hindwing: as in subapicata, without any black blotches; the transverse line preceding the cell-spot.

Underside dull brownish; the submarginal line blackish, dentate, or marked by black dashes on veius; the onter line shown by pale dashes.

Head, thorax, and abdomen like wings; face and palpi black-brown; forelegs black-brown, varied with ochreous.

Expanse of wings: 58 mm.

3 & d from San Ernesto, Bolivia, 1000 m., August and September 1900 (Simons).

# 295. Cratoptera subcitrina spec. nov.

Forewing: cream-colour, sparsely speckled with dark scales; the costa tinged with pale yellow, the costal edge with grey-brown striations; inner line very

obscure, pale olive, from one-fourth of costa to one-fourth of inner margin, bent at right angles in the cell; outer line broadly olive from apex to before middle of inner margin, where it approaches the first line; above vein 7 the olive changes to deep red and is marked on the outside by a black spot; the costal edge immediately before the line is white beyond a small brown costal streak; a very faint angled submarginal line, the lower part from vein 4 to anal angle straight and plainer; cell-spot dull red; fringe olive-brown.

Hindwing: with the broad olive line at one-third, the submarginal angled line obscure; fringe olive-brown.

Underside pale lemon yellow, thickly speckled and striated with brown-grey; an olive-grey-brown streak along costa from base to outer line on forewing, browner close to line which is itself ferruginous; costal spot and cell-spot dark brown; costal edge white with brown streaks; fringe and snbmarginal line olive, brown; an outer curved fine lumulate-dentate brown line on hindwing.

Head, antennae, and collar dark brown; shoulders pale yellow, brown-tinged in front; thorax and abdomen cream-colour, the latter becoming brownish towards anal segments.

Expanse of wings: 38 mm.

2 & d from Upper River Toro, La Merced, Peru, August—September 1901, 3000 m. (Simons).

### 296. Drepanodes fulvilinea spec. nov.

3. Forewing: rufous ochreons, covered with olive-brown striae, and towards hindmargin suffused with the same colour; the striae along costa mixed with orange fulvous; lines deep orange fulvous; first from one-fourth of costa to one-third of inner margin, bent at middle, inwardly edged by a pale yellow line; outer line from three-fifths of inner margin, curved towards apex, before which on vein 7 it is acutely angulated and retracted to costa, where it is blackish edged with grey; the angle is marked by a velvety black dash, and the line is followed by a pale yellow line; cell-spot small and dark; fringe bright orange fulvous with the tips pale.

Hindwing: like forewing; the line central; costal area broadly whitish.

Underside cream-colour, with a pinkish tinge; costa of forewing ochreous, with dark striae; apical area rnfous grey; outer line marked by black spots on veins and a black streak at costa; hindwing dark-speckled along costa and hindmargin; fringe fulvous.

Head brown; shoulders and patagia pale pinkish ochreous; abdomen the same, but tinged with darker along dorsum; hair-pencil of hindtibia black with whitish tip.

♀. Dull violet-grey, fulvous-tinged before the outer line; lines as in the ♂; but the fringes grey and the cell-spot of forewing large; the underside dull lilac-grey; forewing with a large dark submarginal cloud; thorax and abdomen lilac-grey.

Expanse of wings: 30 mm.

1 &, 1 \copp, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November December 1901, wet season (Ockenden).

In the & the apex is bluntly produced, the hindmargin simply oblique; in the & the apex is acute, and the hindmargin bulged in middle and concave below apex.

## 297. Eutomopepla fulgorifera spec. nov.

Forewing: drab, speckled with black; the costa ochreous, with oblique black striae; cell-spot black, distinct; first line at one-fourth, white, lumulate, to one-third of inner margin; outer line at three-fourths, milk-white, acutely angled ontwards above vein 6 and inwards on vein 5, below vein 4 marked by a dark lumulate shading, with black dashes on the veins, or with white dashes, and sometimes obsolete; submarginal line white, zigzag to vein 5, then as outer line; veins 5, 6, 7 finely white between outer and submarginal lines; fringe concolorous.

Hindwing: with dark cell-spot and traces of median and submarginal lines, in the space between which above anal angle is a large quadrate blotch of

coal-black striae on a smoky-black ground.

Underside with more plentiful black striations; markings of upperside partly expressed; apex of forewing ochreous; hindwing with a whitish submarginal line.

Thorax and abdomen concolorous; face, vertex, and collar edged with milk-white; abdomen beneath, pectus, and legs white, the last spotted with dark.

Expanse of wings: 44 mm.

3 & from San Ernesto, Bolivia, 1000 m., August, September 1900 (Simons).

#### Hemixera gen. nov.

Forewing: elongate; costa strongly arched at base, then straight; apex rectangular; hindmargin bluntly bent at vein 4, vertical above, oblique below.

Hindwing: narrow; inner margin short; hindmargin curved from vein 7, the apex subtruncate: in the 9 with a small tooth at vein 4 and slight sinus above it.

Antennae lamellate, simple; palpi quite short, not reaching front of face, which is rounded; tongue and frenulum present; hindtibia with four spurs.

Forewing in the  $\delta$  with the wing-membrane below median vein thinly scaled and stretched, the foveal bar developed, but without actual fovea.

Neuration: forewing, cell more than half as long as wing; discocellular vertical; first median nervule at five-eighths, second at eleven-twelfths; radials normal; 7, 8, 9 long-stalked; 10 free; 11 short, anastomosing and becoming coincident with 12; hindwing, costal and subcostal approximated for about half of cell; veins 7 and 3 both before angles of cell.

Type: Hemixera orthosiodes spec. nov.

## 298. Hemixera orthosiodes spec. nov.

Forewing: olive-yellow, with neat olive-grey striae; the costa with vinous-red striae, in the  $\mathfrak P$  somewhat suffused with that colour; lines vinous red, slender, starting from black-red costal blotches; first at two-fifths, nearly vertical; second from two-thirds of costa, oblique outwards and acutely angled on vein 6, then oblique to two-thirds of inner margin; before apex is another black-red blotch, outwardly marked with a white spot; fringe with basal half deep crimson, marginal half white with black chequering beyond veins; cell-spot linear, olive grey.

Hindwing: yellowish white, unspeckled; some reddish striae along inner margin; a faint reddish submarginal line towards apex, starting from a red spot at three-fourths of inner margin; fringe yellow, chequered with reddish.

Underside of both wings yellow, the inner margin of forewing whitish

base of forewing streaked with orange fulvous; costa of hindwing striated with fulvous; onter lines orange fulvous; forewing with red-brown apical triangle with a white spot at middle; fringes as above; cell-spot fulvous.

Head, thorax, and abdomen yellow; face and shoulders orange-tinged; dorsal segments red-speckled; abdomen beneath yellow; pectus white; legs fuscous.

Expanse of wings: 3, 22 mm.; 9, 26 mm.

1 &, 1 \, from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November, December 1901, wet season (Ockenden).

# 299. Herbita aemula spec. nov.

Forewing: dull red-brown, seantily speckled with blackish, mainly along costa and inner margin and towards base; the lines a shade darker than the ground colour; first from beyond one-fourth of costa to one-third of inner margin, bent in cell, preceded on the veins by small white spots; cell-spot black, followed by a very obscure darker median shade; outer line from two-thirds of inner margin, oblique and very faintly curved towards apex, angled on vein 7, and retracted to costa, followed by a somewhat lustrous pearly line, marked whiter on the veins and on costa forming a snow-white spot; submarginal line represented by some whitish and dark seales below costa beyond angle of outer line, hardly distinguishable below; between veins 2 and 4 a large diffusely edged black blotch beyond onter line; fringe concolorous.

Hindwing: with costa pale; the onter line of forewing continued just beyond middle; cell-spot black in a grey ring; submarginal line zigzag, very obscure, its internal margin in some lights faintly shining; fringe of inner margin pale ochreous.

Underside duller red, with the markings faintly shown.

Head, thorax, and abdomen concolorous; pectus and abdomen beneath reddish; legs mottled olive fuscous and pale.

Expanse of wings: 50 mm.

1 & from Huatuxeo, Vera Cruz.

Hindmargin of forewing gibbons at middle; in *Microgonia rufaria* Warr., which it mimics in a remarkable way, this margin is straight.

# 300. Herbita cervina spec. nov.

Forewing: brownish fawn; costal edge whitish, with black dots; a dull yellow diffuse patch at end of cell containing the small black cell-spot, preceded by a dark shade and followed by a broader more diffuse cloud; a grey semicircular blotch on costa before apex, white-edged inwardly, indented outwardly; the costa beyond it truncate; a very faint darker submarginal shade from it parallel to hindmargin.

Hindwing: with small black cell-spot and indistinct lunulate-dentate post-median line.

Underside paler fawn, with small blackish speekles; a faint postmedian line on forewing; the costal spot outlined with dark; fringe darker; cell-spot black.

Face and palpi brown-black; vertex, thorax, and abdomen like wings; fillet finely whitish; legs fawn-colour; foretibiae and tarsi dark fuscous with whitish spots.

Expanse of wings: 50 mm.

1 & from Huatuxeo, Vera Cruz.

Smaller and darker than II. flavidiscata Warr. from Ecuador, the costal blotch shorter and deeper, the markings more obscure.

## Himeromima gen. nov.

Forewing: with costa slightly curved; hindmargin vertical above middle, oblique below; toothed at veins 6 and 4, crenulate between; inner margin convex.

Hindwing: ample; with a tooth at vein 4, the margin above it crenulate, to anal angle almost convex.

Antennae bipectinate; frenulum present; hindlegs with four spurs.

Neuration: forewing, cell more than half as long as wing; discocellular inangulated; vein 2 at five-eighths, 3 at seven-eighths; radials normal; 7, 8 stalked from the bend in subcostal; 9, 10, 11 coincident just before them, anastomosing with 12, 9 subsequently anastomosing with 8, forming a long narrow areole; bindwing, costal and subcostal approximated for nearly half of cell; 7 from end of cell; discocellular strongly inangulated; no radial; medians as in forewing.

Type: Himeromima aulis Druce (Mccoceras).

## 301. Hygrochroma flexilinea spec. nov.

Forewing: pale lilae, dappled with darker, and with sparse black scales; costal edge paler, with oblique lilae striae; inner and outer lines pale green, double, the edges darker; first curved from one-third of costa to beyond one-third of inner margin, both edges irregularly dentate; outer line narrower, sinuous, from five-sixths of costa to two-thirds of inner margin, curved outwards below costa and again below middle, bluntly angled on the submedian fold and widening downwards; both lines are marked with white dashes on the veins; at the costa the first is edged outwardly and the exterior inwardly with red; a reddish crenulated median line from costa beyond middle is curved round the dark cell-spot and then runs slightly oblique to inner margin, nearly touching the outer line; the outer line is followed by a band of undusted pale ground colour, and this by a dentate and sinuous red line, darker marked on costa before apex; apex pale green; marginal area broad, filled with transverse reddish black-speckled ripples; fringe narrow, greenish.

Hindwing: whitish in basal and costal half, lilae-tinged towards anal angle only; with three lines diverging from the anal margin; the first single, the second indistinctly double, greenish, with white dashes on veins, the third reddish, also marked with white on the veins and followed by a dull grey-green shade; fringe green, with darker green spots beyond the veins.

Underside of forewing pale green, speckled with black and dull red; the median and outer lines and a submarginal shade marked in red and green; inner margin and lower half of outer margin whitish; a blotch of red and black speckles between veins 2 and 3 beyond outer line. Hindwing with basal half coarsely red-speckled; a dentate postmedian line, marked with red on the veins, and a fainter submarginal line; cell-spot very large, round and black, bisected by the pale angulated discoccllular.

Face and vertex pale greenish ochreous; shoulders and patagia tinged with pale lilae, the abdomen whitish, all with scattered black scales; antennae and long third segment of palpi dotted with reddish; legs thickly marked with reddish.

Expanse of wings: 58 mm.

1 ? from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

### 302. Hygrochroma subusta spec. nov.

Forewing: brownish ochreous at base, along costa, and inner margin, transversely striated with purplish brown; the lines purple-brown, double; first at one-third, thick, sharply bent in cell, then oblique and waved to one-third of inner margin, the interval between the arms Instrons silvery; towards the base is another indistinctly double line; outer line finer, oblique outwards from two-thirds of costa, bluntly bent at vein 6, then obliquely and somewhat irregularly waved inwards to two-thirds of inner margin, with lustrons scales between, and preceded by a thick curved streak; marginal area dark olive traversed by a lustrons dentate-lunulate submarginal line; an indistinct costal triangle before apex, olive edged with ochreons; cell-spot and a broad streak beyond it olive; cell and space below it paler ochreons, the triangle at base of veins 2 and 3 semihyaline white; fringe olive-brown with dark line at base and apex.

Hindwing: paler, tinged with olive and purple only towards apex, crossed just beyond middle by a double purple line with Instrous centre, inbent just below costa; traces of a darker olive zigzag submarginal line; fringe brownish olive.

Underside much brighter; forewing pale ochreous; the lines black-brown, ferruginous-tinged; marginal area suffused with olive and purplish, with yellow patches on costa and above anal angle. Hindwing deeper ochreous with broad straight brown-black bar across middle and a fine waved submarginal line of the same colour.

Face dark brown; shoulders, patagia, and abdomen olive-grey barred with paler; anal tufts ochreous; abdomen beneath, pectus, and palpi bright ochraceous; legs ochraceous spotted with brown; third segment of palpi brown.

Expanse of wings: 48 mm.

2 & & from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season, and 2 & & , 1 \, 2, June 1902, dry season (Ockenden).

In the ? the purplish brown tints become ferruginous.

# 303. Ira dislocata spec. nov.

Forewing: dusky flesh-coloured ochreous, speckled with dark green atoms; first line obscurely marked, indicated by the greenish speckles being thicker, outcurved above and below the median vein; a similarly indistinct central shade bent out beyond the dark cell-spot; outer line double, dentate-lunulate, dark green, the inner arm most clearly expressed, except at inner margin, where both are red-brown, running from two-thirds of inner margin obliquely towards apex, more strongly dentate on veins 6 and 7, and then retracted to costa; submarginal line indicated by the dark green teeth, that at apex being blackish green; costal space between the two lines ochreous and pearl-grey, but not forming a distinct blotch; marginal area greyer; fringe also darker.

Hindwing: similar in coloration; the outer line well marked, lunulatedentate, the teeth showing pale; marginal area darker, becoming quite dark green beyond the submarginal line, the lunules of which are filled up towards anal angle with pale ochreous yellow; cell-spot dark.

Underside ochreous, with the flesh-coloured tint very pale, thickly striated

with dark green; cell-spots blackish; outer and submarginal lines cloudy, marked in the main by dark blotches on the veins; the fringes dark.

Head, thorax, and abdomen flesh-coloured ochrcous; fillet snow-white; face brown; third segment of palpi blackish; eyes deep red.

Expanse of wings: 60 mm.

l & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

Distinguished from *I. opalizans*, to which it is closely allied, by the flesh-coloured instead of greenish tint of the wings, the absence of the brown subapical costal blotch, and the ferruginous eyes.

### 304. Ira funerea spec. nov.

Forewing: dark grey, suffused with purplish grey and brown from base to outer line, the marginal area paler, with a pinkish ochreous tinge; first line very indistinct, obscured by the dark suffusion, outcorved above and below median vein; outer line double, black, slightly dentate-lumnlate, obliquely curved from four-fifths of inner margin towards apex, acutely angled on vein 7 and retracted to costa; a pale grey blotch on costa above the angulation; the line is preceded and partially obscured by a broad diffuse brownish shade; costal area tinged with brown; cell-spot black, in a round slaty-grey ring; submarginal line acutely dentate, close beyond onter line, the teeth with some rufous-grey scales within them; marginal area dotted with blackish, paler towards anal angle; fringe grey, paler above middle.

Hindwing: slaty grey, with a straight blackish line at three-fourths, preceded and followed by a blackish suffusion, which extends basewards along inner margin; fringe pale grey.

Underside pale grey along hindmargins only, all the rest of both wings suffused with a smoky brownish-grey tint, and thickly blackish-speckled, the veins rufous; outer line obscurely darker; cell-spots black in a pale grey ring.

Head and thorax brownish grey; abdomen cinereous; legs ochreous dotted with black.

Expanse of wings: 60 mm.

1 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

The apex of forewing is acute, the hindmargin bluntly angled at vein 4.

## 305. Ira igniplaga spec. nov.

Forewing: pale lilac-grey, suffused, except along hindmargin, with olive green, with deeper green freckles and blackish dots; the costa at base rufous-tinged, and in places dotted with white; the lines rufous olive; the first at one-third, curved ontwards above and below the median vein, preceded by an olive shade, ending on inner margin in a fiery orange spot; outer line regularly lunulate-dentate, ending at two-thirds of inner margin in a similar spot, above vein 7 followed by a large bilobed broadly black-edged costal blotch, from the outer edge of which a zigzag olive-green submarginal line runs to anal angle, marked chiefly by the darker teeth; fringe concolorous with the marginal area pale grey; cell-spot black.

Hindwing: like forewing; the unsuffused grey marginal area narrower; onter line at two-thirds' ending on inner margin in a fiery orange spot.

Shoulders, patagia, and thorax greenish grey, like the wings; face paler; palpi fuscous; abdomen pale grey; antennae peppered black and white; legs pale grey mottled with dull green.

Underside pale grey, with coarse black speckles, slightly greenish-tinged throughout, and with a more pronounced but diffuse fasciaform greenish shade beyond onter lines; cell-spots black; basal area of hindwing with fine woolly hair, like that of the pectus and femora; fringe of the inner margin double, fine and silky, pale ochreous.

Expanse of wings: 60 mm.

1 2 from Santo Domingo, C rabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

Apex of forewing sharp, costa at apex shortly truncate; hindmargin oblique; and angle of hindwing slightly lobed, the inner margin somewhat insinuate just before it.

## 306. Ira ochriplaga spec. nov.

Forewing: ochreons in the basal and marginal areas, with the median space between the inner and outer lines sienna brown; the basal space is brownish on costa, tinged with brown at base and with brown-black striae along the veins; the inner line at one-fourth is double, curved, lumulate-dentate, the teeth pointing inwards on the veins, all more or less obscured by the dark brown of the central area; onter line plainer, also lumulate-dentate, from two-thirds of inner margin to a subapical brown costal blotch edged with whitish and indented on each edge, the space immediately before the blotch being paler, ochreous brown; the costal space also paler brown, spotted with dark and pale; submarginal line dentate, the teeth marked with black and white scales, the space along margin beyond it paler ochreous; fringe rich brown; cell-spot round, black.

Hindwing: duller, the brown area greyer and reaching from base to outer line, which is darker brown, regularly lumulate-dentate, and often obsenred; cell-spot black; outer ochreous area suffused with olive-grey, the submarginal line distinct; fringe brown; fringe of inner margin ochreous.

Underside brownish ochreous, or olive grey-brown, black-speckled; cell-spots, onter, and submarginal lines marked; the onter black-clouded on inner margins, the submarginal often faint; marginal space sometimes dusted with whitish, becoming white at apex of forewing; fringe chestnut-brown.

Head and thorax dark brown; abdomen greyish ochreous; the apex of forewing is minutely produced, the hindmargin bulged, not angled in the middle.

Expanse of wings: 48 mm.

3 & &, 1 &, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November and December 1901, wet season (Ockenden).

## 307. Ira opalizans spec. nov.

Forewing: pale stone-colorr, washed with greenish, thickly speckled with dark green (in the only 2 seen these speckles coalesce into a dark cloudy blotch along and beyond the inner line); first line red-brown, from one-third of costa, shortly oblique to middle of cell, there bent, and straight to one-third of inner margin, almost hidden by the dark blotch of speckles in 2; in the 3 only expressed in the costal arm; base of costa to first line red-brown in the 2;

onter line double, dark green, in the  $\mathcal{S}$  nearly straight, in the  $\mathcal{V}$  strongly dentate-lumnlate, ending on the inner margin in ferruginous wedge-shaped marks (blackish and strongly marked in the  $\mathcal{S}$ ); above vein 7 the inner arm is retracted and sinuous to costa, the outer similarly sinuous to close to apex, ferruginous in the  $\mathcal{V}$ , blackish in the  $\mathcal{S}$ , forming the outer edges of a large costal blotch with a bilobed centre; submarginal line lumulate, paler edged, the lumules filled in with dark green scales; space between outer and submarginal lines paler than the rest of the wing; fringe like the marginal area, pale olive stone-colour; cell-spot small, blackish green in  $\mathcal{S}$ , rust-coloured in  $\mathcal{V}$ .

Hindwing: with the outer and submarginal lines both double, strongly marked and rufous-tinted in the  $\mathcal{F}$ , less developed in the  $\mathcal{F}$ , the outer line ending in two rusty marks on inner margin.

Underside similar, without the blotches at apex and on inner margins; eell-spots large, black; outer line distinct, lunulate-dentate, ferruginous in  $\mathcal{F}$ , dark green in the  $\mathcal{S}$ , separated from submarginal line by a band of olive suffusion.

Head, thorax, and abdomen of the pale ground colour, the abdomen deeper tinted above than below and thickly black-speckled; the other parts pure, but the face and shoulders slightly darker; fillet whitish; legs ochreous, spotted with brown; tips of palpi brown.

Expanse of wings: 3, 56 mm.; \$, 65 mm.

1 &, 1 &, from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., December 1901, January 1902, wet season (Ockenden).

Allied to Ira dognini Th. Mg.

#### 308. Ira somnolenta spec. nov.

Closely related to *I. subcostata* Warr. from Ecnador, but essentially distinct; the distinguishing feature of that insect, the broad black subcostal streak of forewing is absent, or at most marked by a few dark scales; the middle line, instead of being distinct and curved, as in *subcostata*, is a mere shade, plainer at costa, below which it is curved round the blackish cell-spot; the outer oblique line is virtually obsolete, being marked only by pale vein-dots and the dark blotch on inner margin where it ends; the submarginal line is variable, distinct in one specimen, almost absent in the other; fringe concolorous.

Hindwing: with the three lines, median, postmedian, and submarginal, as in subcostata, the postmedian indistinct.

Underside with cell-spots only, and no submarginal shade.

Head and shoulders dark brown, like the costal edge of forewing; thorax and abdomen paler, like wings.

Expanse of wings: 60 mm.

2 & from Popayan, Colombia.

The ground-colour is more red-brown and the size larger than in subcostata.

### 309. Ira viridirufa spec. nov.

Forewing: ochrous dusted with olive-fuscous scales beyond outer line; the basal three-fourths overlaid with dull olive-fuscous scales mixed with vinous, this last tint especially developed along inner margin below the submedian vein and along the costal region; the costa dull olive-green with oblique rufous strigae;

first line darker green, obscure, forming a large outward curve above and below the median vein; outer line purplish, irregularly waved and dentate, from two-thirds of inner margin towards apex, forming two more prominent teeth on veins 6 and 7, then recurved to costa and followed by a flattened oblique figure-of-8-shaped costal blotch, the lower half of which is whitish and the costal portion centred with dull green; from its outer edge a dull olive-green strongly zigzag submarginal line runs to before anal angle; the outer line is finely edged with a line of pale ochreous, followed by a diffuse greenish shade; fringe dark olive-green; cell-spot black.

Hindwing: suffused in basal two-thirds with dull olive, the inner margin vinous-tinged, the whole black-speckled; a slightly waved dark green line at two-thirds, followed by a pale line and a diffuse greenish shade; the marginal area dull pinkish ochreous, speckled and clouded with greenish; the submarginal line indistinct; fringe greenish.

Underside pale stone-colour along hindmargins, the rest of both wings suffused with smoky olive fuseous and speckled with black; cell-spots black, large; outer and submarginal lines fine, regularly dentate, dark green; fringe dark green.

Head, thorax, and pectus brown; abdomen cinereous; legs ochrous, with black dots; hindtibia enormously thickened, with a pencil of hairs; the spurs black-ringed.

Expanse of wings: 60 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., January 1902, wet season (Ockenden).

Apex of forewing rectangular; hindmargin evenly curved.

This species and funerea described above would, perhaps, be better placed in the genus Bonatea Druce.

# Isochromodes Warr., Nov. Zool. i. p. 461 (1894). Spilocraspeda id., L.c. ii. p. 155 (1895).

I find that these genera cannot be kept separate; the species extimaria Wlk., which I made the type of Isochromodes, and its nearest allies are somewhat larger and differently marked from the generally smaller and less conspicuous species which I at first referred to Spilocraspeda; but, in the light of further experience, the distinction can no longer be maintained. The species appear to be very numerous, and in many cases closely allied and subject to considerable variation; the comparison of the underside of the wings affords the readiest means for the determination of doubtful insects, of which the uppersides are almost exactly identical.

# 310. Isochromodes atristicta spec. nov. and ab. dissipata nov.

3. Forewing: pale ochreous, tinged sometimes in places with deeper ochreous, and dusted with blackish; two black spots on median vein, one at extreme base, the second a little beyond; the lines pale fulvous; first from one-fourth of costa to one-fifth of inner margin, somewhat outcurved above, and angled outwards on the veins, the angles marked by black spots; cell-spot large and black; outer line lumulate-dentate, thickened on the veins, angled at vein 4 so as to form two curves concave outwards, from two-thirds of inner margin to apex, preceded throughout by a parallel series of large black spots on the veins; a slightly

waved fulvous median line, bent ontwards above, and below the median approximated to outer line; large black subterminal spots on veins 1, 2, 3, and 5; a black streak from the angle of outer line above vein 3, and another below vein 3, the two joining an angled black mark at the margin across vein 3; small black marginal dots, that on vein 3 larger; fringe ochroons.

Hindwing: without first line; a curved blotch of black scales from inner margin between median and submarginal lines ending in the angled mark at vein 3.

Underside paler, thickly black-speckled, with an irregular diffuse blackish subterminal shade on both wings.

Head, thorax, and abdomen ochreous; face whitish; antennae, tips of shoulders, a large blotch on metathorax, and the anal segments of dorsum black.

Of the two \$\frac{\pi}{2}\$ neither agrees exactly with the \$\delta\$; one has all the black spots enlarged, but the two horizontal black streaks to margin of forewing and the curved black blotch on hindwing are both absent, and the dorsum is simply black-spotted on each segment; the subterminal shade beneath is darker and larger. The other \$\frac{\pi}{2}\$, ab. dissipata, has no spots whatever; the two arms of the outer line coalesce to form a thick black lumulate-edged shade, throwing out two strong black projections above and below vein 3; and the black curved mark on hindwing is strongly marked; in both wings there is a black marginal line from below median vein to anal angle. Underneath the submarginal shade is slight on forewing and absent on hindwing; the cell-spots are entirely absent on both sides.

Expanse of wings: 35 mm.

1 &, 2 \, \varphi\,, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November and December 1901, wet season (Ockenden).

The 3 antennae are subservate and ciliated. Both this and the succeeding species must be allied to *Isochromodes bermeja* Dogn. (Sabulodes).

### 311. Isochromodes auxilians spec. nov. and ab. denotata nov.

3. Forewing: pale wood-colour, thickly freckled with dark atoms; the costa speckled and striated with grey; the lines nearly as in I. atristicta, but the inner line at one-third is thick, nearly vertical, bent only below costa; dark grey in colour and hardly marked with darker on the veins; the outer line is neater and marked with slighter black spots, and above vein 7 is retracted to costa instead of running into apex; the subapical spot visible belongs apparently to the submarginal series in this species; the black marks above and below vein 3 are present but variable in extent and intensity; cell-spot and marginal spots black, and of ordinary size.

Hindwing: with the curved black blotch large in the type form, absent in the aberration denotata.

Underside with a very slight submarginal grey shade in forewing, but the outer line distinct.

The single 2, which belongs to the aberr. *denotata*, differs in having the median line blackish instead of fulvous; the outer line concisely black, edged with grey, forming two simple curves from inner margin to vein 4 and again to vein 7, where it is plainly retracted to costa; the dark scales at vein 3 of forewing and anal angle of hindwing are all but absent; underneath, on the contrary, the outer line and submarginal shade are blackish and strongly marked.

Head, thorax, and abdomen as in atristicta.

Expanse of wings: 28-30 mm.

3 & d, 1 ♀, from Sauto Domingo, Carabaya, S.E. Peru, 6000 ft., November and December 1901, wet season (Ockenden).

In this species the antennae of the  $\delta$  are flattened, and the lateral angles of each joint are produced into short tubercles bearing fascicles of cilia.

### 312. Isochromodes crassa spec. nov.

3. Forewing: ochreous, washed with ochraceous, with coarse black speckles; the lines ochraceous, diffuse, all placed as in *innotata* Warr.; the outer line is distinctly marked by black points on the veins throughout; on the inner margin, where it approaches the median line, the two form a generally conspicuous upright brownish blotch; submarginal line marked by black spots on the veins; marginal black dots at the vein-ends projecting into the pale ochreous fringe.

Hindwing: similar, without first line; the lines well marked by black dots. Underside whitish, slightly speckled; costa of forewing yellowish; outer line always indicated to vein 4, sometimes below it, followed to vein 3 only by an irregular blackish shade which swells out into an oblong blotch between veins 3 and 4; the line alone indicated in hindwing.

Face ochreous, brownish at top; palpi externally brown; fillet whitish ochreous; thorax and abdomen like wings; the dorsal segments with pairs of black spots.

The ? is smaller, more thickly speckled, with no ochraceous tinge, and the lines obscure.

Expanse of wings: 3, 40—45 mm.; 2, 40 mm.

5 & S, 3 ♀ ♀, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901—January 1902, wet season (Ockenden).

### 313. Isochromodes fraterna spec. nov.

Forewing: sandy ochreons, thickly speckled with fuscous; the lines indistinct, slightly darker, placed as in *innotata* Warr. and *Paracomistis dispar* Warr.; the onter line from four-fifths of costa, marked as in *innotata* by distinct black veinpoints on veins 4, 5, 6, 7, then incurved and joining median line on inner margin, marked by a black point on vein 1: submarginal line marked by black spots on veins 5, 3, 2, and 1; black marginal spots at the vein-ends running out into the whitish fringe; cell-spot black; the costa thickly striated with grey.

Hindwing: like forewing, but without first line.

Underside yellowish straw-colour, dark-speckled along costa and hind-margin of both wings and near base of forewing; forewing with a narrow concise blackish shade from four-fifths of costa to above anal angle, thickened internally to vein 4 by the blackish outer line; hindwing with a similar narrow curved shade; marginal lines and cell-spots black.

Face and palpi externally brownish; vertex grey; thorax and patagia greyish ochreous; abdomen pale ochreous, with pairs of black spots on the dorsal segments.

In the  $\mathfrak P$  the forewing is more densely speckled; the lines more distinct, rufons-tinged; and beneath the submarginal shades are twice as broad as in the  $\mathfrak d\mathfrak d$ .

Expanse of wings: 3, 36 mm.; 2, 40 mm.

2 & &, 1 \, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

### 314. Isochromodes grisea spec. nov.

Forewing: pale lilac-grey, with a few dark speckles; the lines slightly darker, brownish-tinged; first from one-fourth of costa to one-third of inner margin, bent in cell and black-dotted on veins; onter line from four-fifths of costa, incurved at vein 4 and meeting median line on inner margin, marked by black vein-dots; submarginal line indicated by black spots on all the veins but vein 4; black dots beyond veins in the white fringe; cell-spot black.

Hindwing: without first line.

Underside white, slightly dark-speckled along costa and hindmargin of both wings and in basal half of forewing; an oblique diffuse fuscous cloud from four-fifths of costa of forewing to hindmargin at vein 2; costa of forewing yellowish; cell-spot black; hindwing with a very faint curved shade, plainest along margin at and below middle; marginal lines black.

Head, thorax, and abdomen like wings; the abdomen somewhat paler; the face darker, more brownish. The markings of the 2 are more conspicuous.

Expanse of wings: 38-40 mm.

6 중경, 2 우우, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

Nearest to the type species *extimaria* Wlk. from Rio Janeiro, but distinct both above and below.

### 315. Isochromodes latifascia spec. nov.

Forewing: dull fawn-colour, finely speckled with dark; the lines reddish fawn, thick and diffuse; first at one-fourth, sinnous, bent outwards in cell and inwards on submedian fold; median line thick, passing over the small black cell-spot, below middle lunnlate-dentate; outer line diffuse from nearly three-fourths of costa, irregularly lunulate-dentate, and angled ontwards on vein 4, closely approaching median line on inner margin; from the teeth at veins 4 and 3 an oblique reddish shade to hindmargin between the ends of veins 2 and 3; submarginal line fairly distinct, dentate on veins; marginal dots not conspicuous, reddish fawn; fringe greyish ochreous.

Hindwing: paler at base, and without first line.

Underside pale stone-colour, with an ochraceous tint, and covered with grey striae and speckles; cell-spots large; a broad black submarginal fascia from beyond two-thirds of costa to anal angle, the apical areas whiter, dark-speckled, without the ochraceous tinge; lower part of outer lines indicated; marginal line and fringe spots black; fringe ochreous.

Head, thorax, and abdomen pale and dark fawn; face and palpi externally darker.

Expanse of wings: 36 mm.

1 9 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

### 316. Isochromodes pallidifimbria spec. nov.

3. Forewing: wood-brown, with a grey tinge, with very fine dark speckling; the lines rufous-tinged; first from one-third of costa to one-third of inner margin, bent in cell, with darker dots on veins; median line from two-thirds of costa to middle of inner margin, slightly curved beyond the black cell-spot; outer line sinuous from three-fourths of costa to inner margin close beyond median line, slightly black-marked on veins and edged with grey; submarginal line macular, rufous; distinct black marginal spots at the vein-ends before the pale grey fringe.

Hindwing: with the cell-spot large, round and black, the space around it rufous.

Underside whitish grey, densely mottled with dark: a cloudy marginal fuscous border, leaving apex whitish; cell-spots marked on both wings, the outer line on forewing only; fringe whitish, with black spots at base.

Face and palpi internally pale ochreous: palpi externally dark fuscous except terminal segment; vertex, thorax, and abdomen grey-brown.

9. Much paler, ochreous grey, with plainer speckling, and all the markings more distinct; the rufous tints paler.

Expanse of wings: 30 mm.

1 3, 4 ♀♀, from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

# 317. Isochromodes palumbata spec. nov.

Forewing: greyish ochreous, washed with pale fulvous, and covered with coarse dark grey striations; first line indistinct, from one-fourth of costa to one-third of inner margin, ending there as a tawny angulated mark; cell-spot black, followed by an ill-defined waved fulvous median shade, beyond which the ground-colour is tinged with tawny; outer line dark brown, irregularly crenulate, from four-fifths of costa to three-fourths of inner margin, outcurved between veins 5 and 2, and marked externally by white dots on the veins; marginal area beyond line pale dove-grey, unspeckled, limited by an ill-defined pale submarginal line beyond which the space is striated and fulvous-tinged; between veins 2 and 3 lies a large dark grey clond; marginal spots dark at end of veins; fringe pale grey.

Hindwing: to the outer line ochreous tinged with fulvons; cell-spot black, adjacent to an obscure fulvous median line; cuter line and marginal area as in forewing.

Underside pale stone-grey, speckled with dark; cell-spots and outer lines marked; marginal area darker grey, with a still darker submarginal fasciaform cloud from costa, leaving the apex paler.

Head, thorax, and abdomen pale grey; face and fillet whiter.

Expanse of wings: 30 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1901, wet season (Ockenden).

Antennae of  $\delta$  subservate, the joints angular with long fascicles of cilia. This may possibly be an abnormally coloured  $\delta$  of I, rufigrisea Warr.

### 318. Isochromodes rufigrisea.

Spilocraspeda rufigrisca Warr., Nov. Zool. vii. p. 224 (1900).

The species was described from a \$\pa\$ only; the \$\pa\$ proves to be somewhat different, being uniformally dark brown, without the reddish and grey variations of the \$\pa\$. In the \$\pa\$ the space between inner and median line is grey, and between median and outer line reddish; in the \$\pa\$ both are brown, the outer rather darker; the outer brown line is more conspicuously edged with slightly lustrous grey; the marginal area is brown like the rest of the wings, the submarginal line being indicated by darker grey-edged lunules preceding it, more or less inconspicuous, but the two on veins 2 and 3 always black, followed by an outer blackish blotch, and all surrounded by grey scales. These are present on the hindwing also. Underside as in the \$\pa\$. The antennae are like those of \$I. auxilians\$, the angles of the joints being produced and bearing short tufts of cilia.

4 33 along with 3 \$\$, quite typical, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November and December 1901, wet season (Ockenden).

#### 319. Isochromodes terminata spec. nov.

Forewing: dark brown; both in colour and markings very much resembling the  $\delta \delta$  of I. rujgrisea; but in this case both sexes are alike; the two lines darker than the ground colour, thick, and marked with fine white dashes on the veins; the first slightly curved from one-fourth of costa to one-third of inner margin; the onter from four-fifths of costa to two-thirds of inner margin, bent outwards between veins 5 and 2; cell-spot black; in the  $\Re$  there is a slight patch of dark grey scales between veins 3 and 4 beyond onter line; in the  $\delta$  there are two black wedge-shaped marks on veins 2 and 3, as in rufgrisea  $\delta$ ; fringe brown, with dark spots beyond veins; in the  $\Re$  the base of fringes is distinctly whitish; the outer line is whitish on inner margin.

Hindwing: similar, without basal line.

Underside cream-colour, slightly dark-speckled; the marginal borders dark fuscous throughout; fringe brown, with pale base and distinct dark spots beyond the veins.

Head, thorax, and abdomen brown.

Expanse of wings: 28 mm.

1 &, 1 \, from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

The 3 antennae are subserrate, hardly pubescent, without ciliations or fascicles.

### 320. Isochromodes vestigiata spec. nov.

Forewing: sandy ochreons, thickly but finely dusted with fuscous; the lines very much as in innotata Warr. and its allies; the inner line vertical and slightly waved at one-third; the outer from five-sixths of costa to two-thirds of inner margin, angled ontwards on vein 4, slender and brown, not marked by black vein-dots, but followed by a grey shade; the median line waved and approaching outer line above inner margin, passing beyond the black cell-spot; submarginal marked by dark spots or blotches on veins; marginal dots small; fringe concolorous.

Hindwing: with the outer line slightly angled ontwards at vein 4, meeting

median line on inner margin; marginal area beyond it rather darker, with traces of submarginal spots on veins.

Underside pale straw-colour, with dark speckles along costa and hindmargins of both wings and towards base of forewing; onter line well marked in both wings; followed in forewing by a diffuse brown shade from costa to margin at vein 2, in hindwing by a slight curved submarginal shade; cell-spots and marginal line black.

Face brown; fillet whitish; thorax and abdomen like wings.

Expanse of wings: 40 mm.

2 & & from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., November 1901, wet season (Ockenden).

# Loxapicia gen. nov.

If Guenée's name, Apicia, be retained for the broad-winged typical species of the genus, such as *ribicaria* Cram., a fresh term must be found for those species with narrower and more elongate wings and more oblique markings, typified by *lintearia* Guen., the females of which have shortly pectinated, instead of simple, antennae.

### 321. Loxapicia humerata spec. nov.

Forewing: ochreous tinged with flesh-colour and lilac-grey, slightly black-speckled; markings much as in L. lintearia Guen.; the basal area filled up with lilac-grey; the basal line itself black-brown, at costa and below middle more plainly expressed than in lintearia, and starting farther from base of wing; onter line double, dark brown, the outer arm more concise, broader in the middle than on inner margin, acutely angled just before apex and retracted to meet a short inwardly oblique brown mark from costa, followed by a black spot in the paler apical space; the outer line is followed by a lilac-grey shade; marginal area stained with brown towards margin; submarginal line indicated by dark wedge-shaped marks between veins; fringe dark brown.

Hindwing: with long slender brown striations; the outer line of forewing median, touching the black cell-spot; a straight brown submarginal line or shade; fringe brown.

Underside coarsely black-speckled, the forewing stained with brown; all the dark markings shown, but duller.

Face and palpi brown; vertex and collar dark grey; patagia lilac-grey; abdomen ochreous, with pairs of black spots.

Expanse of wings: 35 mm.

1 & from R. Solocame, Bolivia, 1200 m., January 1901, wet season (Simons), type; 1 & from Chulumani, Bolivia, 2000 m., December, wet season (Simons).

The patagia and basal area of forewing are lilac-grey; the two lines nearer together on inner margin.

# 322. Loxapicia straminea spec. nov.

Forewing: pale straw-colour, speckled with brown; traces of a brown first line from one-fifth of costa to one-fourth of inner margin, angulated in the cell before the black cell-spot; outer line dark brown, thick and wavy-edged externally, from middle of inner margin into apex; submarginal line indicated by brown spots between the veins; fringe straw-colour.

Hindwing: with the broad line median, following the cell-spot; slight signs of a submarginal line towards anal angle.

Underside similar, with the lines obscurely marked.

Head, thorax, and abdomen all straw-colour.

Expanse of wings: 33 mm.

1 9 from Bulim, Ecuador, December 1900—February 1901 (Flemming & Miketta).

The single specimen is much wasted, but it is manifestly distinct from any described species.

### 323. Melinodes contacta spec. nov.

Forewing: dull yellow, thickly striated with greyish fulvons; costal edge pale with brown striae: lines grey-brown; first from one-fourth of costa to one-third of inner margin, sinuous, slightly oblique below costa and before margin, preceded by a grey shade marked with fine white dashes on veins; outer line from three-fourths of costa, oblique and straight above vein 3, then bluntly bent at right angles to vein 2, thence vertical to two-thirds of inner margin, followed by a grey shade marked with white dots on veins; an obscurely lumulate-dentate submarginal line near hindmargin, curved inwards to touch outer line at vein 3; fringe ochreous chequered with grey; cell-spot grey-brown, somewhat elongated.

Hindwing: like forewing, but without first line.

Underside pale ochroous, with the lines and cell-spots brown; forewing thickly speckled with fuscons.

Head, thorax, and abdomen like wings; vertex brighter ochreous; face and palpi grey.

Expanse of wings: 30 mm.

2 33 from Charaplaya, Bolivia, 1300 m., June 1901 (Simons).

Greatly resembling M. farra Warr., but the outer line quite different.

# Mesedra gen. nov.

The species for which this genus is proposed are separated from Apicia Guen., in which the 33 have fully pectinated antennae, on the one hand, and from Pseudapicia Schaus, where those antennae are quite simple, by having antennae with angulated joints, each angle capped with a tubercle ending in a fascicle of cilia. The costa of forewing is not straight, but strongly arched throughout; the hindmargin of forewing slightly elbowed in the 4 only, that of hindwing projecting as a small tooth in middle in both sexes. The neuration likewise differs: in the forewing vein 9 does not rise separately from the cell, but is stalked with 7, 8, anastomosing in the usual way, first with 10, 11, and subsequently with 8; in the hindwing the costal and subcostal are not merely approximated, but closely contiguous for half the cell.

Type: Mesedra confinis spec. nov.

Eusarea? parallelaria Warr. and Apicia venusta Dogn. will also come into this genus.

#### 324. Mesedra confinis spec. nov.

3. Forewing: dull ochreous, speckled with blackish; the lines very indistinct, pale brownish, but marked by black spots on the veins; first from one-fourth of costa to one-fourth of inner margin, bent in the cell, followed by the black spots;

outer line from costa shortly before apex to three-fourths of inner margin, bluntly bent on vein 7, preceded by the row of black spots; a faint median shade visible in lower half of wing, parallel to outer line and nearer to it than to inner line; cell-spot black; space just beyond outer line clearer, unspeckled; three black spots or blotches between veins 2 and 3, the two inner obliquely above each other and tonching the veins, the outer between them; slight black marginal dots at end of the veins in the fringe; fringe concolorous.

Hindwing: with the median shade brown and distinct, passing over the black cell-spot, the outer line less distinct.

Underside very thickly speckled, especially in the forewing; cell-spots and outer lines marked.

Head, thorax, and abdomen ochreous; ontside of palpi and upper part of face brownish; vertex whitish; collar and base of costa brownish; dorsal segments of abdomen with pairs of black spots.

\$\varphi\$ with the lines accompanying the black spots much broader and more distinct; submarginal line represented by brown blotches on veins on both wings; marginal area and fringes pale brownish; the three black spots absent.

Expanse of wings: 35 mm.

1 &, 1 \, from Agualani, S.E. Pern, 10,000 ft., September 1901 (Ockenden).

### 325. Mesedra juvenis spec. nov.

Forewing: pale ochreous, slightly speckled with brown; the lines brown, fairly distinct, and marked themselves by blackish dots on the veins; the inner rather more remote from base and the outer reaching inner margin nearer middle than in M. confinis; central shade closer to outer line, and only visible below; cell-spot black; the three dark submarginal spots as in M. confinis; a row of dark marginal spots; fringe concolorous.

Hindwing: with the inner shade antemedian, well before the black cell-spot; the postmedian line farther from the outer margin than in confinis; a macular submarginal line.

Underside thickly speckled; the outer line of forewing doubled, and the submarginal shade distinct.

Head, thorax, and abdomen pale ochreous.

Expanse of wings: 26 mm.

2 ♂ ♂, 1 ♀, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

Hindmargin of forewing evenly curved in  $\mathcal{S}$ , slightly bent in  $\mathcal{S}$ ; of hindwing distinctly elbowed in middle; fascicles of antennae of  $\mathcal{S}$  decidedly longer, more pedicellate, than in *confinis*.

### 326. Mesedra munda spec. nov.

Forewing: bone-colour, sparsely dusted with dark atoms; towards the base tinged with pale brownish or ochraceous, and beyond the outer line brown; first line very fine and indistinct, pale brownish, oblique from one-fourth of inner margin to middle of cell before the black cell-spot, where it fades out; outer line thick, dark brown, from three-fifths of inner margin into apex; it is preceded below middle by a fine pale brownish line representing the median; the brown space beyond it is edged inwardly close to the line by a thick darker brown shade, running to

apex also; the submarginal line is represented by a diffuse blackish blotch lying on vein 3; a slight dark marginal line; fringe dark brown.

Hindwing: wholly bone-coloured; with three straight lines; first antemedian, pale brown, corresponding to the slight median line of forewing; a double post-median, the inner arm dark brown, the outer diffuse, corresponding to the darker shade of forewing; and a submarginal line, less distinct; a small dark cell-spot; fringe brownish.

Underside tinged with pale brownish, with all the markings obscurely indicated. Face and vertex white; palpi, shoulders, and abdomen ochreous; patagia whitish. Expanse of wings: 3,22 mm.; 2,24 mm.

1 3, 1 7, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

Hindmargin of hindwing bluntly dentate or elbowed in middle. This will distinguish the species from venusta Dogn.; I rather suspect that the  $\mathfrak P$  which Dognin coupled with his  $\mathfrak S$  is really munda.

### 327. Mesedra subsequa spec. nov.

Forcing: ochreous, dusted with pale brown and fuscous speckles; the two lines dark leaden grey, of the same character as in the ? of M. confinis, but the first is more sharply angled in cell in front of the black cell-spot which it almost tonches, while in confinis it is roundly curved well before it; onter line thick and oblique from just beyond middle of inner margin into apex, edged inwardly by a fine brown line and somewhat deflected in its course, not simply curved; cell-spot black; beyond it slight traces of a rusty median line; fringe ochreous, with minute dark dots beyond veins.

Hindwing: with a short basal line; a fine obscure median shade touching the cell-spot; a straight postmedian grey shade concisely edged internally; the whole wing with rusty striae; fringe as in forewing.

Underside pale ochreous, much less speckled than in conjinis; the grey lines all shown.

Head, thorax, and abdomen ochreous; vertex whitish; collar brown.

Expanse of wings: 32 mm.

1 ? from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

Hindwing with a distinct angle at middle of hindmargin, which separates it at once from the  $\Im$  of *confinis*, which it much resembles.

#### 328. Mesedra violacea spec. nov.

Forewing: cream-colonr, tinged with violaceous, with coarse brown speckling; first line at one-third, bent below costa, marked by large brown spots on veins, the shade connecting them violaceous, stronger and darker at costa and inner margin; outer line from four-fifths of costa, angled outwards on vein 7, then oblique, bluntly bent on submedian fold to two-thirds of inner margin, similarly violaceous brown, and marked by large brown vein-spots; sometimes lunnlate-dentate, and followed by a violaceous shade running into apex, with a slight lastrous line between; submarginal line formed by brown vein-spots, those on 1, 2, and 3 being large and conspicuous; cell-spot brown-black; fringe brown.

Hindwing: more thickly black-speckled, especially towards base; no inner line; the test as in forewing; sometimes a distinct median grey shade, which is

hardly visible in forewing; the violaceous finge strongest in both wings towards hindmargin.

Underside violaceous grey, coarsely and thickly black-speckled; cell-spots and outer line of spots conspicuous.

Face, palpi, and collar brown; vertex and base of antennae snow-white; shoulders grey; patagia, thorax, and basal segments of abdomen white; anal segments violaceous-tinged; dorsum with pairs of dark spots and sometimes speckled with dark.

Expanse of wings: 3,28 mm.; 9,30 mm.

3 & & , 3 & & , from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

The 3 antennae are armed with pedicellate fascicles of eilia, much longer than in other Mesedra, except M. juvenis, with which this species also agrees in having the hindmargin of hindwing without any projection at middle.

### 329. Metanema fuliginosa spec. nov.

Forewing: greyish ochreous, tinged and speckled with rufous; a curved diffuse shade at one-fourth, marked with a black dot in cell and another on submedian vein; cell-mark diffuse, rufous; outer line straight, red-brown, from middle of inner margin to four-fifths of costa, followed by a deeper tint; submarginal line indicated by black vein-dots; those on veins 8, 7, 6, 5 nearer outer line, those on 4, 3, and 1 farther off, that on vein 2 developed into a black blotch nearly touching the line; fringe concolorous; very minute dark dots at the ends of the veins.

Hindwing: with the line antemedian, crossing the cell-spot; the submarginal dots farther off and indistinctly united by a shade.

Underside pale bright ochreous, coarsely speckled with black; costa of forewing rufous; a broad sooty-black submarginal faseia projecting squarely to hindmargin between veins 4 and 6 in both wings, and again below vein 2 in forewing; cell-spots large, smoky black; the outer line marked by deep black spots on veins and towards costa by black lumiles.

Face and palpi black; fillet whitish; vertex and thorax rufous; abdomen paler. Expanse of wings: 42 mm.

1 9 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., December 1991, wet season (Ockenden).

I refer it to Metanema provisionally, in the absence of the 3.

# 330. Microgonia distans spec. nov. and ab. perfusa nov.

Forewing: olive-grey, dusted with extremely fine dark atoms, which towards the costa form slender strigae: marginal area beyond the oblique line paler; this line, broadly olive-brown, starts from inner margin at nearly three-fourths, and runs straight nearly to apex, before which it is retracted and bent to costa at three-fourths, and is joined a little before the angle by a slighter dark costal mark; an obscure inner line from costa at one-fourth is bent at right angles in cell and runs straight to inner margin at one-third; cell-spot small, black; fringe dark.

Hindwing: with the line central, broader, and diffusely edged internally, bent at vein 6, followed on costa by a subquadrate black blotch; cell-spot slight,

blackish; marginal area somewhat darker, except at apex, containing faint traces of a submarginal line.

Underside paler grey, with sparser and larger dark mottlings; cell-spots black, distinct; outer line blackish, interrupted, followed by a black submarginal cloud, which does not reach the costa. Hindwing with the submarginal cloud broader and externally dentate, preceded by a curved dentate line, marked by black vein-spots; a slight dark line between this and the cell-spot.

Head, thorax, and abdomen grey; the fillet slightly paler.

Expanse of wings: 70 mm.

1 & from Paramba, Ecuador, November—December 1898, type; 7 & & from San Ernesto, Bolivia, 1000 m., August—September 1900 (Simons).

Of these seven examples three differ from the type form, with which the other four agree, in having the outer half of wing before the dark oblique line suffused with olive-green, darkening to the line, which is more or less lost in the suffusion. In one instance the whole wing to base is thus suffused, the line is narrower, subcrenulate, and edged with pale, and the basal line and median shade are both strongly developed. This aberration, which may be named perfusa, superficially much resembles M. distichata Guen., but on closer comparison they will be found distinct.

It is, however, quite possible that the species here described is identical with *M. aromata* Druce (*Oxydia*), *Biol. Centr. Am., Lep. Het.* ii. p. 27. t. XLIII. fig. 11, described from a \( \frac{9}{2} \). I have quite lately been able to examine a \( \frac{9}{2} \) exactly like that figured, and, though the two sexes are very different in ontward appearance, the disposition of the markings strongly suggests their identity, which further experience must be left to determine.

### 331. Microgonia gueenéei spec. nov.

Oxydia agliata Guen., Phal. i. p. 62, ♀ only. Oxydia gastropachata var., Druce, Biol. Centr. Am., Lep. Het. ii. p. 27. t 43. fig. 10, ♀.

Forcuing: yellow othreons, with an olive suffusion, which is much more pronounced in the  $\beta$  than in the  $\beta$ , and thickly speckled with coarse olive atoms which are more conspicuous in the  $\beta$ ; basal area darker.—more densely speckled, — than the rest of wing, bounded by an olive-grey line at one-third, outcurved above and below the median vein; a small black cell-spot, followed by a median shade, often inconspicuous, but well marked and distinct in some of the paler, yellower, examples of the  $\beta$ ; outer line oblique from beyond middle of inner margin towards apex, before which it is acutely angled on vein 7, and retracted to three-fourths of costa; in the  $\beta$  this line is usually thick, dark brown, in the  $\beta$  finer, olive-grey, ontwardly edged with a pale line of ground colour, generally followed by a darker grey shade, cloudy in the  $\beta$ , and formed of speckles in the  $\beta$ ; a dark grey, irregularly zigzag, cloudy submarginal line, plainer in the  $\beta$ ; the apex of the wing darkened with speckling; fringe darker.

Hindwing: with a central dark line, bent on vein 6 and always thicker above the bend, often, but not always, followed on costa by a blackish blotch; submarginal line as in forewing.

Underside ochreous tinged with ochraceous, coarsely speckled with grey, more thickly in the  $\Im$ ; all the lines marked, and in addition a postmedian line, closely approximated to outer line on the inner margin of forewing, diverging from it

towards costa, farther from the median and curved on the hindwing; the marginal area beyond submarginal line greyer.

Head, thorax, and abdomen concolorous.

Expanse of wings: 3, 70—74 mm.; 9, 80—82 mm.

1 8, 1 9, from Jalapa, Mexico, type; 1 9, Huatuxco, Vera Cruz.

The Vera ('ruz specimen is very much brighter than the Jalapa examples.

In his description of agliata Guenée gives the expanse of the  $\mathcal{S}$ , which he describes first, as  $\mathbb{S}^0$  mm., that of the  $\mathbb{S}^2$  as  $\mathbb{S}^2$  mm.; but, as far as I know, there is no species of the genus Microgonia of which the  $\mathbb{S}^2$  is smaller than the  $\mathbb{S}^2$ ; this, therefore, is a prima facie cause for believing that Guenée's  $\mathbb{S}^2$  was not conspecific with his  $\mathbb{S}^2$ . The species which I have described above has hitherto been usually identified as agliata, but I do not think the identification correct; for, though there are several points in which the two agree, there are others which cannot be made to fit in with both.

### 332. Microgonia siccifolia spec. nov.

Forewing: lilac-grey, washed with chocolate-brown, finely speckled with dark atoms; first line very indistinct, at one-third, forming two curves outwards, one above, the other below the median vein; onter line thick and distinct, chocolate-brown, from inner margin just beyond middle towards apex, hardly convex ontwards, at vein 7 acutely angled and retracted to costa; space between the lines tinged with chocolate-brown, deepening to onter line, the costal area remaining lilac-grey; onter area again becoming chocolate along the margin including the fringe, remaining pale lilac-grey along the onter line; cell-spot minute, black.

Hindwing: with the outer line median.

Underside dall olive-grey, thickly speckled, with a dark postmedian line in both wings, not answering to those of the upperside.

Head, thorax, and abdomen rnfous grey, like the base of forewing.

Expanse of wings: 56 mm.

1 9 from Agnalani, S.E. Peru, 10,000 ft., September 1901 (Ockenden).

Forewing with apex produced, falcate; hindmargin gibbous below the sub-apical sinus.

# 333. Microgonia subdecorata spec. nov. and ab. prunicolor nov.

Forewing: deep olive-brown, covered with fine dark striations; the area within the angle of the outer line from two-thirds of costa widening ontwards to hind-margin paler, more purely olive: first line from one-third of costa to two-fifths of inner margin, bent in cell; outer line from three-fifths of inner margin straight towards apex, before which it is acutely angulated on vein 7, and retracted to costa; submarginal line very obscure, marked by white dashes on veins; fringe concolorous, with pale tips; cell-spot oval, whitish, with a minute dark centre.

Hindwing: with the line antemedian; no visible cell-spot.

Underside purplish brown along hindmargins, all the rest of the wings suffused with a dove-coloured sheen and varied with blaish-white flecks and striae, these chiefly in cell of forewing and along costa of both wings; cell-spots larger; an outer line of dark lumnles, accompanied towards costa by bluish-white scales, not corresponding to the oblique line of the upper surface, the uppermost lumnle on hindwing forming a whitish blotch; submarginal line better marked by whitish

scaling, ending on forewing in a large cream-white costal blotch nearly filling up the apical projection.

Head, thorax, and abdomen concolorous; legs ochreous, speckled with olive-brown.

Expanse of wings: 60-65 mm.

2 99 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., June 1902, dry season (Ockenden).

The smaller specimen is without the olive tint, plum-coloured and overspread above, except towards outer line and again towards hindmargin, with a purplish sheen, while the dove-coloured tint below is quite dull, with the white markings restricted to the cell-spots and the course of the outer lines, the pale costal blotch of hindwing being especially distinct; the apical projection of forewing is very decidedly shorter and the hindmargin more bulged at middle than in the example described as type. This form I call ab. prunicolor.

# 334. Microgonia subdentilinea spec. nov.

Close to *M. mexicata* Guen., but differing as follows: the marginal area of forewing and the whole of the hindwing much darker, brownish olive; the pale blotch on inner margin beyond onter line larger, and tinged with flesh-colour; costa of forewings olive-brown; the shade following first line and the median shade at costa dark leaden grey and more conspicuous.

Underside of forewing entirely without the yellowish tint of mexicata; the two olive-brownish clouds separated by the paler space to anal angle, which occur in that species, entirely wanting, the whole marginal space being greyish, with a waved dark line from inner margin near to anal angle; in the hindwing the dark curved line is not simply curved and narrowed towards outer margin, but more broadly curved, farther from outer margin, and lumnlate-dentate, and the line is not edged with paler. Face and shoulders olive-brown, like costal edge of forewing.

Expanse of wings: 60 mm.

1 & from Corondalet, Ecnador (Flemming & Miketta).

### 335. Microgonia subductaria spec. nov.

Also, like M. subdentilinea, allied to M. mexicata Guen., but quite distinct.

The forewing differs from both in having the apex not produced and the hindmargin straight and more oblique. The forewing is darker grey with scarcely any tinge of olive; the costa is concolorous with the ground colour; the outer line more curved and irregularly waved, and the pale spot of inner margin beyond the outer line restricted in size; the fringe concolorous, not rufous-tinged. In the hindwing the cross-line reaches the inner margin nearer the anal angle.

Underside ashy grey, without brown or yellowish tinge, paler grey beyond the outer line; in the hindwing the dark line is simply curved from three-fifths of costa to two-thirds of inner margin without any projection in the middle towards outer margin; a darker waved submarginal shade, also showing slightly on forewing at inner margin; fringe dark grey.

Head, thorax, and abdomen concolorous, the abdomen along dorsum and the shoulders darker grey.

Expanse of wings: 56 mm.

1 & from S. Javier, R. Cachabi (Flemming & Miketta).

Distinguished at once by the more sombre coloration, non-falcate forewing, and especially by the course of the line on underside of hindwing.

### 336. Microgonia versilinea spec. nov.

Forewing: pale pearl grey, slightly tinged with fawn-colour, sparsely black-speckled, and striated with grey; the fawn-coloured suffusion is strongest immediately beyond the first line, which is, as usual, curved above and below the median vein, but not marked except by the difference of tint; the outer shade beyond the small black discal point is also fawn-colour and produced broadly to anal angle; no oblique line in the usual position; the outer line leaves the costa at four-fifths as a curved chocolate-brown streak running towards outer margin, before which it is angled at vein 7 and descends as a fine whitish line diverging somewhat from hindmargin to four-fifths of inner margin, slightly deeper-tinted interiorly and marked with pale dashes on veins; beyond its costal arm is a kidney-shaped chocolate-edged spot, with paler, ochreoustinted centre, separated from the line by a whitish costal spot; fringe olive rufous with broad white basal line.

Hindwing: similar, paler along costa and towards base; the pale line parallel to, but farther from the hindmargin, the marginal area darker; cell-spot black; fringe as in forewing.

Underside pale grey, black-speckled, without markings; black cell-spots; fringe rufons grey, without white basal line.

Head and collar dark brown; shoulders pale ochreous, like base of costa of forewing; thorax concolorous with wings; abdomen wanting (probably the same).

Expanse of wings: 45 mm.

1 & from Chimate, Bolivia, September 1900 (Simons).

In colour resembling M. cyclopeata Moeschl., but separated by the course of the outer pale line.

# 337. Mieroxydia (?) colorata spec. nov.

Forewing: brown, speckled with darker; deeper brown in basal area and beyond median line; first line black-brown, from one-fifth of costa to one-third of inner margin, forming a strong curve outwards above and below the median, the curves filled in with leaden grey; outer line at four-fifths, forming at first an acute projection outwards between veins 7 and 6, then mainly parallel to hind-margin, slightly bent outwards below submedian fold; followed by a broad leaden-grey shade starting from a snow-white spot on costa; nearer the apex is a slighter white spot at the beginning of the submarginal line, which is leaden grey, interrupted, and zigzag, and below the middle forms a large blotch coaleseing with the shade beyond outer line; median line dark brown; cell-spot black in a leaden-grey ring; fringe grey-brown.

Hindwing: without first line; outer line curved parallel to hindmargin; the rest as in forewing.

Underside dull leaden grey; both wings with broad marginal brownish fuscons borders leaving the apical areas pale grey.

Face and palpi dark brown; vertex and shoulders brownish, tinged with leaden grey; thorax, patagia, and abdomen above brown like wings; abdomen below pale grey.

Expanse of wings: 23 mm.

1 9 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

# 338. Microxydia fulvicollis spec. nov.

Forewing: cream-colour tinged with lemon-yellow, chiefly along the course of the usual lines, which are represented by diffuse shades; the first near base, curved, and most distinct on inner margin; the outer oblique, beyond middle, starting from a bright chestnut subapical costal blotch, formed of the retracted portion of the line from vein 6, where it is angled, to costa, followed by a costal blotch edged with lustrous lilac and a smaller one at apex; fringe pale yellow.

Hindwing: cream-colour, with a small fulvous yellow spot at two-thirds of

inner margin, representing the onter line; fringe pale yellow.

Underside of forewing cream-colour, the costal half yellow; base of costa and cell-spot fulvous brown; apical blotch chestnut. Hindwing yellowish tinged, with slight brown cell-spot and outer line indicated at costa; fringes vellowish.

Face and vertex snow-white; palpi, collar, and base of shoulders chestnut; thorax, patagia, and abdomen cream-colour washed with yellow; antennae brown.

Expanse of wings: 24-26 mm.

4 33, 1 2, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

# Mimoprora gen. nov.

Like Isochromodes Warr., from which it is at once distinguished by the palpi which somewhat resemble those of Anisodes; the terminal joint is sometimes as long as the first and second together, and is deflexed nearly at right angles to the second; which is rough-haired, while the third is slender with appressed scales and blunt at the tip. The antennae of the 3 are subserrate and pubescent merely, not ciliate or fasciculate. The hindmargins of both wings are rounded, showing no trace of elbow. The hindtibiae of the & are greatly swollen, with four spurs.

Neuration: forewing, cell half as long as wing; discocellular vertical; first median nervule at one-half, second at seven-eighths; radials normal; 7, 8, 9 stalked from bend in subcostal; 10 and 11 coincident anastomose with 12, 10 separating afterwards, but not anastomosing with 8, 9.

Type: Mimoprora rubra spec. nov.

A second species, of which I have seen a single ? only, must from the palpi be referred to this genus; this, from the description, I identify as Sabulodes granula Dogn., of which the palpi are said to be "assez longs, à dernier article grêle et nu."

# 339. Mimoprora rubra spec. nov.

Forewing: dull brick-red or brownish red, speckled with dark; the lines darker, indistinct, but marked by blackish pale-tipped spots on the veins; first at one-third, bent in cell; outer at five-sixths, biconcave, angled ontward on vein 4; cell-spot black mingled with grey; an indistinct median shade, parallel to outer line; fringe concolorous, with small black marginal dots at the vein-ends.

Hindwing: similar; the cell-spot large; costal area at base whitish.

Underside rufous ochreous, sparsely speckled; cell-spots black; a smoky blackish marginal band, broad on forewing, but thinning out towards anal

angle, and leaving a pale grey subapical space above vein 4; narrower and not reaching anal angle on hindwing; a dark marginal line.

Head, thorax, and abdomen concolorous; abdomen beneath ochreous.

Expanse of wings: 28-30 mm.

3 dd from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November—December 1901, wet season (Ockenden).

### 340. Mimosema flexa spec. nov.

Forewing: brownish grey, slightly reddish-tinged, speckled and striated with fuscous; lines reddish brown, thick, the inner preceded and the outer followed by a bright ochreons line; the first from one-fourth of costa to one-third of inner margin, bluntly bent in cell; the outer straight and oblique from quite three-fourths of costa to three-fourths of inner margin; submarginal line obsence, but marked by two black wedges on veins 2 and 3, followed by a black spot between them; marginal line reddish grey, interrupted by pale spots at the veins; fringe like wing, with darker middle line, spotted beyond veins below middle; cell-spot black.

Hindwing: similar, without first line.

Underside pale grey, dark grey beyond outer lines, which are marked by black spots on veins; cell-spots black; fringe pale, with dark spots.

Head, thorax, and abdomen like wings; face and palpi brown.

Expanse of wings: 22 mm.

2 & 3 from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

The hindmargin of both wings slightly bent in middle, the hindwing with a slight tooth.

# 341. Mimosema rufa spec. nov.

Forewing: rufous thickly speckled with fuscons; the lines darker rufous, or brown; first from one-fourth of costa to one-third of inner margin, straight; second from two-thirds of costa to two-thirds of inner margin; first preceded and second followed by a grey line; cell-mark linear, brown; submarginal line hardly distinguishable; fringe rufous, the tips paler.

Hindwing: with cell-spot and outer line only, the latter running into anal angle.

Underside pale reddish ochreous, paler in hindwing; the lines and cell-spots all marked; the lines fine and interruptedly lumulate-dentate, sometimes thick and dark grey; costa of forewing with dark striae.

Thorax and abdomen like wings; face and vertex deep red.

Expanse of wings: 3, 30 mm.; ?, 34 mm.

4 33, 2 99, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November, December 1901, wet season (Ockenden).

The ?? are darker throughout, the underside redder.

# 342. Mixopsis bella spec. nov.

Forewing: white, flecked with reddish and olive green and sparser black scales; the costa marked with dull reddish oblique spots and striae; the inner and outer lines olive green, double; the inner at one-third, its inner edge curved

below costa, then vertical, its outer edge broadly dentate on the median vein and again on submedian, concave between; exterior line oblique from two-thirds of inner margin towards apex, the inner arm, which is deeper green, passing from vein 7 vertically to the costa, marked on veins 7 and 8 by a blackish point; the large annular cell-mark also olive green; between it and the outer line a blood-red sinuous line outwardly dentate on the veins, almost touching outer line at inner margin; marginal line lumulate, dark green; fringe shining whitish, chequered with red beyond the veins.

Hindwing: whiter along costa and at base; cell-spot large and round, greenish, with a black central dot; outer line double, greenish, curved; preceded by a reddish sinuous streak from inner margin to cell-spot, and followed by a dentated green submarginal shade; marginal line and fringe as in forewing.

Underside whiter, with fewer speckles and without much red tinge; forewing with the costal striae, the discal occllus, and the two lines pale green; a red cloud on costa before outer line, stretching across the line towards the middle of hindmargin: hindwing with large black cell-mark, and the two outer lines green.

Face and palpi white below, tinged with red above; vertex and shoulders ochreous; thorax and abdomen whitish ochreous, the latter with fine dark dusting; legs ochreous spotted with dark green.

Expanse of wings: 45 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

Closely resembling M. typtaria Feld., but with much more complex markings.

# 343. Nematocampa completa spec. nov.

Forewing: straw-colour, striated with red-brown, and with the veins red; first line at one-third, thick and straight, not curved; outer third of wing red-brown, with an oval apical space of ground colour, the inner edge also forked at middle on costa; discal line and a curved median line red; fringe wholly red.

Hindwing: wholly red-brown, except a narrow median costal blotch of ground colour, reaching to below the origin of vein 4; a slightly paler submarginal space above anal angle, followed by three black wedge-shaped spots before bindmargin between veins 2 and 4; fringe red.

Underside with margin of forewing as above; hindwing with red-brown margin narrowing off to anal angle, the basal two-thirds straw-colour.

Head, thorax, and abdomen straw-colonr with brown speckles; the face paler. Both wings are angled at middle of hindmargin.

Expanse of wings: 28 mm.

1 & from Pambilar, Ecuador (Flemming & Miketta).

#### 344. Paracomistis subtractata Warr.

Until now the only specimen of the species I had seen was the original  $\delta$  type from Surinam, described in *Nov. Zool.* iv. p. 498 (1897). Two  $\Im$  lately received from S.E. Peru differ both *inter se* and from the  $\delta$ ; but the peculiar oval pale space containing the cell-spot of hindwings will always serve to identify the species. In the best-preserved example the ochreous ground colour is very thickly covered with brownish striae and speckles; the outer line with its angle is very slender and indistinct, but there is a very distinct median shade, not seen at all in the  $\delta$ ,

running straight from two-thirds of costa to middle of inner margin, where it closely approximates to the outer line, and is continued across hindwing before the cell-spot. Underneath the wings are densely speckled, the forewing also suffused, with brownish grey, and with a diffuse dark cloud from costa before hindmargin, leaving the apical space whitish; in neither wing is there a trace of outer angulated line, which in the 3 is conspicuous. In the other \$\parallel\$, which is quite pale ochreous (being considerably wasted), the outer line and a more or less waved, not straight, median shade form the edges of a brownish fascia crossing both wings. In this case also, on the underside, there is no distinct outer line, but only a submarginal shade on forewing.

For the present I must refer them both to subtractata. They are slightly larger than the 3, 27 mm. to 24 mm., and are dated November 1901, wet season,

from Santo Domingo, Carabaya, S.E. Peru (Ockenden).

### Paradoxodes gen. nov.

Forewing: costa nearly straight; apex blunt; hindmargin well curved.

Hindwing: unusually broad, the abdominal margin largely developed and somewhat furrowed beneath, constricted towards base; hindmargin well rounded.

Antennae (3) slender, filiform; palpi short and stont, porrect, second segment broad, third minute, button-shaped; tongue and frenulum present; hindtibiae thickened, with four spurs; abdomen slender, smooth, pectus not hairy beneath.

Neuration: forewing, cell quite three-fifths of wing: discocellular unusually fine, faintly outcurved below; first median nervule at three-fourths, second close before third; lower radial from a little above middle of discocellular; upper from upper angle of cell; veins 7, 8, 9 stalked, 10 and 11 free; hindwing, costal approximated to subcostal for nearly half of cell; veins 3 and 7 both before angles of cell.

Type: Paradoxodes subdeeora spec. nov.

Distinguished from *Pseustopluca* Warr. by the simple autennae of the  $\delta$ , and from *Certima* by the smooth and slender body.

# $345. \ \, \textbf{Paradoxodes} \, \, \textbf{subdecora} \, \, \, \textbf{spec.} \, \, \, \textbf{nov.}$

Forewing: dark brown, slightly purplish-tinged, with a few scattered pale scales in places; no distinct lines, but there are traces of darker curved fasciae, one near base, a second more distinct in middle, and apparently two more towards hindmargin; fringe concolorous.

Hindwing: uniformly brown.

Underside of forewing, with the base, except along costa, glossy bluish white, the edge of the patch curved at one-third and diffused along inner margin towards anal angle; a deep yellow spot beyond cell; hindwing with three-fourths of the wing bluish white, only the hindmargin remaining of the dark colour, broad at apex, angled in the middle, and narrowing off to anal angle, where there is also a streak of the white within the dark border.

Head, thorax, and abdomen like wings; pectus bluish white; foretarsi dotted with white.

Expanse of wings: 39 mm.

1 & from Marcapata, E. Peru, 4500 ft.

Superficially recalling Certima mima and mimula Th. Mg. (Sabulodes) and Pseustoplaca obscurissima Th. Mg.

### 346. Pergama plenilunata spec. nov.

Intermediate in point of size between P. traillii Butler (= mathanaria Oberth.) and Pero stuposaria Gueu., both of which it greatly resembles superficially. It may be distinguished by the following points: the outer line in the forewing is nearly straight, not strongly incurved in its middle third; the discal spot is a grey circle with a black edge, and is preceded by an oblique orange blotch from the costa; on the underside the pale area at anal angle occupies the whole width of the interval between outer line and hindmargin, and above touches vein 4; in traillii it lies on the hindmargin, reaching only half-way to outer line, and above, not beyond vein 3.

Expanse of wings: 44 mm.

1 & from R. Inambari, E. Peru, 1000 m., July 1900, rainy season (Simons).

### 347. Pergama semiusta ab.? latifascia nov.

Along with six typical examples of P, semiusta Butler from Santo Domingo, Peru, taken in November 1901, there was sent one  $\beta$  which differs so considerably that it might well be considered a distinct species. The points in which it thus differs are shortly as follows: all the purplish grey scales of the type, both above and below, have become dull brick-red; the onter line of the forewing is much nearer the hindmargin, so that the central fascia is much wider; the dark shading which usually precedes this line is entirely lost, the line itself being simply edged with black, while above the median, instead of running, as in the type, nearly straight to costa, it forms three ontward curves as strong as those below; the line is followed by a pale greyish space which merges gradually into dull brick-red before the margin, without any of the usual markings. From the greater breadth of the central fascia, the absence of the normal shading, and the brick-red coloration, the insect assumes quite a different aspect from normal examples of semiusta.

### 348. Perusia complicata spec. nov.

Forewing: yellow, speekled and slightly tinted with rufous grey, the veins marked with the same colour, especially towards hindmargin; basal patch triangular, rufous and fuscous, hardly reaching the costa, its outer edge twice curved and indented below median vein, edged by an obscurely double dark line reaching middle of inner margin; a similar-coloured postmedian fuscia, its inner edge marked by a double thick zigzag line, angled outwards on veins 3, 4 and 6, inwards on vein 5, its outer formed by the submarginal line, which is acutely angled on vein 7 and on veins 2 and 3, close to hindmargin, incurved basewards between 7 and 3, leaving a yellow space; a few dark scales along hindmargin, which is faintly bent outward at middle; fringe yellow; cell-spot grey, linear, indistinct.

Hindwing: whitish yellow, with a rufous grey patch at anal angle, continued as a faint submarginal band towards costa; inner margin marked with dark scales; tringe yellow; hindmargin slightly indented beyond cell.

Underside pale yellow; the basal patch and postmedian fascia of forewing dark purplish; cell-spot larger, purplish; hindwing with interrupted purplish submarginal band.

Head and face yellow; abdomen white; thorax and dorsal area of abdomen rufous grey.

Expanse of wings: 26 mm.

1 9 from Baños, Peru, September 1899 (Haensch).

This seems distinct from any of the forms of praecisaria H.S., though superficially like it.

### 349. Perusia graphica spec. nov.

Forewing: buff, speckled with brown and ferruginous; first line from one-fourth of costa to one-third of inner margin formed of round blackish spots on veins; an additional spot on inner margin; cell-spot pale reddish brown, diffuse; onter line from four-fifths of costa, oblique outwards to vein 6, marked by three round blackish spots, angled and incurved as a fine grey thread to two-thirds of inner margin, preceded by a band of greyish buff, and this by a cream-coloured space widening downwards and containing near its outer edge three brownish patches on the veins; a slight reddish mark on costa before apex, edged with white; fringe buff.

Hindwing: paler, with a slight cell-spot: a darker buff band from inner margin above anal angle containing black spots on veins, obsolete above middle.

Underside with the markings all indicated.

Thorax buff, like forewing, the patagia with brown spots; metathorax with a pair of brown spots; abdomen paler, like hindwing, with a pair of brown spots on basal segment; vertex and face paler; legs brown-spotfed.

Expanse of wings: 26 mm.

 $1\ \mathcal{S}$ from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., May 1902, dry season (Ockenden).

## 350. Perusia superstes spec. nov.

Forewing: glossy pale lemon-yellow, dusted with brown specks; costa tinged with brown, especially near base; the lines brown; tirst at one-third, slightly bent on subcostal vein, otherwise straight; outer line from five-sixths of costa, oblique outwards to vein 6 near hindmargin, there bluntly angled, and sinuous inwards to quite two-thirds of inner margin, above which it is edged with paler brown; a semicircular purplish grey costal mark before apex, its inner arm traversed by the outer line; a rather large brown cell-spot; fringe worn (yellow?).

Hindwing: paler, with a brown outer line, obsolete towards costa.

Underside more coarsely brown-speckled; costa and apex of forewing yellowish; outer line marked by brown vein-spots, and an oblique brown costal streak; cell-spot dark brown; inner line indicated; hindwing with cell-spot and outer series of spots.

Head and thorax pale yellow; thorax with a pair of black spots; abdomen yellow, tinged with ferruginous and with oblique fulvous lateral stripes. I have doubts whether this abdomen belongs really to the specimen.

Expanse of wings: 28 mm.

1 & from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., May 1902, dry season (Ockenden).

# 351. Phyllodonta carneata spec. nov.

Forewing: greyish fawn-colonr, with a few faint darker striations; no distinct lines, but two slightly darker shades, the first just before the black cell-spot,

sinuous to middle of inner margin, the outer from costa a little before apex obliquely curved inwards to vein 4, then vertical to inner margin before anal angle, followed by a dull flesh-coloured brown-edged blotch on veins 2 and 3, constricted and all but interrupted in middle, with another less distinct on the margin; fringe brownish.

Hindwing: with a flesh-coloured belt from apex to anal angle, preceded by a somewhat deeper shade; the veins slightly paler; a small black cell-spot.

Underside paler, with black cell-spots and a faint darker submarginal shade.

Head, thorax, and abdomen concolorous with wings; legs ochreous, brown-spotted.

Expanse of wings: 60 mm.

1 9 from Santo Domingo, Carabaya, S.E. Pern, 6000 ft., June 1902, dry season (Ockenden).

The outline of the wings is intermediate between *Phyllodonta* and *Paragonia*, the excision beneath vein 4 being less pronounced; apex of forewing slightly produced, acute; hindwing with a straight blunt tail in middle.

### 352. Phyllodonta puritana spec. nov.

Forewing: pearl grey, speckled with black, especially along inner and hind-margins; cell-spot black; costal edge paler, spotted with black; the lines starting from chocolate-brown spots; first at one-third, marked only at costa and on inner margin; median shade outcurved beyond cell-spot, obsolete below vein 4; outer line from four-fifths of costa, angled outwards on vein 7, then oblique inwards to vein 2, forming an abrupt outward sinus between 2 and 1, to inner margin at three-fourths, where, like the first line, it is marked by some dark scales; this line on the veins is marked with white dashes, and is followed by a slightly paler grey tinge; from vein 4 to the submedian fold just beyond the apex of the sinus of outer line two vertical blackish shades enclose a narrow pale grey space and are followed by a dark rufons and grey shade to outer margin; fringe chocolate brown, darker beyond veins.

Hindwing: rather darker grey, black-speckled only along inner margin; a small cell-spot; traces on inner margin above anal angle of two rufous lines which become obsolete in hindwing; fringe as in forewing, with a pale line at base.

Underside of forewing speckled with black along costa and hindmargin; an interrupted median shade, a fine lumulate onter line, and thick subapical streak before hindmargin dull brown; a blackish apical blotch. Hindwing striated with brown; a macular median shade, obscure waved postmedian and thick zigzag submarginal lines also brown; a blackish subapical blotch; cell-spots black in both wings.

Head, thorax, and abdomen pearl grey, the last black-speckled; forelegs bright chocolate brown, spotted with white.

Expanse of wings: 56 mm.

1 ♀ from Sauto Domingo, Carabaya, S.E. Peru, 6000 ft., June 1902, dry season (Ockenden).

The wing margins are subdenticulate at the vein-ends, vein 6 of forewing with a larger tooth; the marginal projection beyond the semicircular excision ent square in both wings.

### 353. Phyllodonta semicava spec. nov.

Forewing: lilac, with a violet tinge, sprinkled in parts with black scales; costal edge pale, dotted with dark green; first line at one-third, angled ontwards above and below the median vein; vinous fuscous, preceded by a pale green shade above, and below the middle by a purplish and green shade, this last preceded by a patch of fiery orange scales on a pale ochreous ground; a conspicuous snowwhite dash before the line on the median and submedian veins; cell-spot black, followed by a curved vinous median shade from middle of costa, indistinct below middle, touching outer line on inner margin; outer line from five-sixths of costa, bluntly angled on vein 7, then oblique to just beyond middle of inner margin, double, vinous on costa and inner margin, pale green between, marked with small white dashes on veins 2, 3, 4, 5, larger spots on veins 1 and 6, those on 7, 8, and costa coalescent into a streak; submarginal line vinous red, marked chiefly by points on the veins and a blotch on costa; above the submedian vein between the inner and outer lines and on inner margin before the outer are patches of fiery orange scales; the marginal area thickly sprinkled with violet and green scales; fringe chocolate brown, darker beyond veins.

Hindwing: with basal two-thirds dirty ochreons, with a slight vinous tinge, coarsely striated with purplish fuscous, and towards inner margin with orange scales; outer third, beyond a dark sinuous line, purplish grey, the veius paler and marked with brown; submarginal line not marked except towards anal angle, where it passes through an irregular ochreons patch; fringe from apex to vein 4 pale ochreous with chestnut spots beyond veins, wholly chestnut below; cell-spot large, greenish fuscous.

Underside ochreous, densely speckled with black, vinous, and green seales, and tinged in parts with the same colours; on forewing, all four lines thick and black; a pale unspeckled blotch below middle of marginal area, preceded by a triangular blackish cloud; hindwing with two lines, the central sinuous, touching a round black cell-spot, the outer lumulate, followed by a dark shade at inner margin; a reddish submarginal spot on veins 2 and 3.

Head and thorax lilac, abdomen ochreous, all black-speckled; legs ochreous, dark-marked; pectus greenish ochreous.

Expanse of wings: 56 mm.

1 ? from S. Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

In character of markings resembling *flabellaria* Th. Mg. and *songaria* Dogn., but the hindmargin of forewing is simply bulged at middle, without the least trace of the tooth and excision characteristic of the genus, which are both present, as usual, in the hindwing.

# 354. Phyllodonta vivida spec. nov.

- 3. Almost exactly like the 3 of *semicava*, but the hindmargin of forewing is not simple, but irregularly crenulate, veins 2 and 6 ending in a small tooth, and veins 3 and 4 forming a blunt square projection; a slight curved excision below it between 2 and 3.
- 2. Forewing: bright tawny red, fiery red towards inner margin; costal edge pale with slight dark specks; first line with the central space filled up with pale olive scales; a red-brown median line, squarely bent beyond cell-spot, ending on

inner margin close to outer line, interrupted between veins 1 and 3; onter line shaped and placed as in the 3, edged by a shining white line followed by a pale olive-green line, separated from the red marginal area by a broad cream-coloured shade, which expands into a large triangular blotch of the same tint before anal angle and another on costa before apex, this latter tinged with pink and grey and containing a bilobed dark-brown spot at the commencement of the submarginal line, which forms the external edge of the cream-coloured shade; veins towards hindmargin paler; cell-spot black in a grey-green ring.

Hindwing: much as in the &, but brighter red.

Underside of opale brick-red, slightly speckled with brown: forewing with inner margin whitish to submedian fold; the three lines well marked, stopping short at the fold; the outer followed below middle by a large black blotch and then a whitish one; submarginal line zigzag below costa and merely paler than the ground colour; apex olive ochreous, this colour also forming a band beyond outer line and forming a broad streak along upper half of cell. Hindwing with inner margin whitish, without markings, to submedian fold; a thick curved brown median line, interrupted by the large oval black cell-spot; outer line dentate, dark and light green; a prominent row of brown submarginal spots intersected by the pale veins; fringe brownish with pale base.

The  $\delta$  has the underside less red, more olive grey-brown, with the markings plainer and more numerous.

Head and thorax bright red; abdomen pinkish grey.

Expanse of wings: 8, 45 mm.; 9, 52 mm.

2 & &, 2 & &, from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901 to January 1902, wet season (Ockenden).

# 355. Pseudapicia muscivaria spec. nov.

Forewing: pale ochreous, dusted with olive and fuseous atoms, somewhat more densely in the  $\mathfrak{P}\,\mathfrak{P}$ : inner line always very obsence, double, curved, from before one-third of costa to one-fourth of inner margin, the outer arm marked with dark dots on the veins; outer line also double, from a little before apex to two-thirds of inner margin, slightly sinnous, both arms lumulate-dentate, the lumbes shallow, the inner arm fine, marked with black points on the veins, the outer thick and diffuse, olive green; in the  $\mathfrak{F}$  the line is nearer the apex than in the  $\mathfrak{P}$ , and the vein-spots below the costa are larger; close before the outer line on the inner margin there are traces of a fulvous median line which curves away above middle; cell-spot black; submarginal line very obsence, but indicated below middle by three black lumnles preceding it, and a slight brown-speckled shade beyond it; fringe ochreons, with small black dots beyond veins at the base.

Hindwing: with median line rather more distinct, wavy, touching the small black cell-spot; the rest as in forewing; the submarginal line more distinct.

Underside ochreous, speckled with olive in the  $\mathcal{I}$ , with blackish in the  $\mathcal{I}$ ; the cell-spots and outer lines marked and sometimes parts of the submarginal line.

Palpi ochreons within, brown externally; face whitish with a brownish bar above; vertex white; thorax and abdomen pale ochreons, dusted with darker; dorsal segments in 3 with a pair of dark dots or ringed with dark.

Expanse of wings: 26 mm.

3 & & , 3 & & , from Santo Domingo, Carabaya, S.E. Peru, November 1901—January 1902, 6000 ft., wet season (Ockenden).

In the  $\delta$  the ground colour is paler and the markings are darker than in the  $\Re$ ; the apex and elbow at vein 4 are more produced in the  $\Re$ , with the hind-margin between slightly concave; in the  $\delta$  these are hardly observable; the antennae of the  $\delta$  are thick, subserrate, with short fascicles of cilia.

## 356. Pseudapicia sororcula spec. nov.

Forewing: pale ochroons, speckled with olive brown and blackish scales and partially slightly tinged with olive brown; first line distinct, angled strongly in cell and on submedian fold, from one-fourth of costa to one-third of inner margin, double, the onter arm marked with black scales, the inner fulvous, with a slightly lustrous pale grey line between: onter line situated as in Ps. muscicaria, from costa just before apex to two-thirds of inner margin, but straight, not dentate-lumlate, slightly blackish-marked on the veins, preceded by a distinct and broadish fulvous olive shade, reaching nearly to costa, and followed by first a pale lustrous line and then a narrow olive brown line, running into apex; marginal area partly suffused with greyish olive; submarginal line indistinct, crossing a long blackish blotch between veins 2 and 3, and marked by a small brown spot on vein 5; fringe ochroons, with largish brown spots beyond veins in the basal half; cell-spot large, blackish.

Hindwing: without first line; the outer line as in forewing but nearer to the margin than in Ps. muscivaria, starting from costa close to apex, instead of, as in that species, some distance before it; submarginal line fairly distinct, dentate-lunnlate, edged outwardly with pale grey and inwardly with olive brownish; fringe as in forewing.

Underside paler, the costa of forewing and the hindmargins of both tinged with greenish and with coarse black speckling; the outer line marked with black at costa and on the veins, and the shade following showing dark; a blackish blotch between veins 2 and 3; cell-spots and marginal spots darker.

Head, thorax, and abdomen ochreons; second segment of palpi externally and sides of face blackish; dorsal segments of abdomen in 3 black-spotted.

Expanse of wings: 24 mm.

2 & d, 1 % from Santo Domingo, Carabaya, S.E. Peru, 6000 ft., November 1901, wet season (Ockenden).

Very much like *Ps. muscicaria* described above, but distinguished first by the much greater hairiness of the head and thorax; secondly by the shape of the wings: in the forewing the elbow at vein 4 is more pronounced and the margin above it hollowed out; in the hindwing the angle at 4 appears less prominent because the margin at vein 6 is also strongly produced and elbowed, which is not the case in *muscicaria*; besides, the black submarginal blotch of forewing in the present species lies between the veins, whereas in *muscicaria* the black blotches are on them.

# 357. Pyrinia formosa spec. nov.

Forewing: bright canary yellow, without dusting; outer half of wing rosy fulvous, except at anal angle; from the apex a broad deeper rosy band runs to just beyond the middle of inner margin, containing a line down its centre marked by white points on the veins, those beneath costa larger and clearer; cell-spot small, black; fringe rosy fulvous.

Hindwing: not suffused with rosy, but with the rosy band across the middle, from vein 6 to inner margin; fringe yellow; a few black scales on marginal third.

Underside yellow, tinged with fulvous, with a few brown speckles; forewing with a brown-black interrupted line from apex to vein 2; the line hardly shown on hindwing.

Face, vertex, and palpi fuscous like front of forelegs; thorax and abdomen vellow.

Expanse of wings: 30 mm.

1 & from Peru.

The forewing is shortly falcate; in shape the species is like *P. pholata* Guen., but the coloration is different.

# 358. Pyrinia junctaria spec. nov.

Forewing: bright yellow, the speckling rufous, towards costa darker; a narrow oblique costal streak of dark atoms at two-fifths, almost or quite touching a roundish brown cell-spot; another roundish spot not so dark below median before the origin of vein 2; a broad oblique rufous brown streak from apex to middle of inner margin, double throughout, the inner half paler than the outer, the outer embracing a slight extent of hindmargin, the inner a similar extent of costa; a large brown-black spot at anal angle with two slight specks of brown scales above it; fringe yellow, below apex brown.

Hindwing: with distinct central straight brownish streak; a brown spot at apex; fringe yellow.

Underside similar, but the markings duller; in hindwing a more or less complete submarginal band of brown speckling; forewing with a slight pearly spot before apex followed by a yellow costal spot, between the two arms of the oblique line.

Head, palpi, and antennae dark chestnut; thorax and abdomen yellow.

Expanse of wings: 26 mm.

3 & from Salampioni, Bolivia, 800 m., Angust, 1901, dry season (Simons).

Distinguished from *cerocamputa* Guen, by the absence of the white spot at apex, as well as by the broader browner obtique line; *mephasaria* Wlk. from Rio Janeiro is much larger.

### 359. Sicya ennomaria spec. nov.

Forewing: yellow, the costa fulvous with short dark striae; first line from two-fifths of costa to one-third of inner margin, straight and oblique inwards, fulvous, plain only at costa and inner margin; outer line from five-sixths of costa to three-fifths of inner margin, very fine, slightly waved, and darker marked on veins; marginal area beyond it fulvous brown, with slight darker striations, narrowly lilac grey along margin below middle beyond an indistinct submarginal line and also at costa before apex; fringe purplish with pale tips; cell-spot minute, brown.

Hindwing: whitish at base, pale fulvous in marginal area, with two pairs of purplish streaks, quite short on inner margin above anal angle; cell-spot very obscure.

Underside whitish yellow, fulvons along costa and beyond outer line of fore-wing; more faintly in hindwing; a brown blotch at anal angle of hindwing.

Head, thorax, and abdomen yellow, vertex and shoulders paler; thorax and dorsum tinged along middle with fulvous.

Expanse of wings: 30 mm.

1 & from Huatuxeo, Vera Cruz.

Differs from typical *Siega* in having the hindmargin of forewing strongly crenulate and forming a blunt square projection between veins 5 and 6.

### 360. Simopteryx obliterata spec. nov.

Forewing: dull olive yellowish, with coarse grey strigae in places; costal area broadly streaked with pale chestnut brown; two diffuse pale brownish clouds on hindmargin, one from before apex to middle of hindmargin, the other from vein 4 to anal angle; a small erect blotch on inner margin at two-thirds, brownish with grey strigae; lines marked only on costal streak as dark outwardly oblique marks at one-third, one-half, and two-thirds; the first is preceded and the third followed by some pale lilac-grey scales and a narrow white line on costal edge; before the apex is a brown patch edged by a short white line representing the submarginal; cell-spot marked by a few whitish and grey scales intermixed; fringe brown with some whitish scales along margin below apex, at middle, and above anal angle.

Hindwing: with the grey strigae fewer; cell-spot grey; white marginal scales reaching from apex to middle.

Underside bright yellow tinged with fulvons, and with large coarse brown speckling; costal area washed with whitish; cell-spot and subapical streak white; basal area and a submarginal fascia constricted in middle fulvous, with dense brown speckling; hindwing with cell-spot black.

Face and palpi externally brown; vertex and antennal shaft lilac grey; shoulders dull olive yellow with the tips dark; abdomen like wings; patagia brighter yellow; pectus and palpi internally bright deep yellow.

Expanse of wings: 56 mm.

1 & from Rio Solocame, Bolivia, 1200 m., January 1901, wet season (Simons). Distinguished at once by the absence of all lines except at costa.

# 361. Sphacelodes quadrilineata.

Polla quadrilineata Warr., Nov. Zool. vii. p. 222, ♀ (1900).

The original type was a ? from Cachabí, Ecuador. Along with a second ? from S. Javier, R. Cachabí (Flemming & Miketta), there has also come a &, taken by the same collectors, from Corondalet, Ecuador, which shows that the species must be referred to Sphacelodes Guen.

The \$\mathcal{d}\$ expands 37 mm., and is therefore larger than the \$\mathcal{c}\$. Instead of the large round orange discal spot, which is so conspicuous in the hindwing of the \$\mathcal{c}\$, the \$\mathcal{d}\$ has merely a small dot. In all else the sexes are alike on the upperside. But below the whole surface of the \$\mathcal{d}\$ is covered with rough velvety brown-black scales, except along hindmargins and at apex of forewing, which are brownish ochreous. The foretibiae are clothed with a fringe of dark hairs and the forefemora with a curled wisp of ochreous brown hairs, while the coxae bear a large patch of long curled straw-coloured scales. The antennae of the \$\mathcal{d}\$ are bipectinate, the pectinations straight and regular, but hardly so long as in \$Sphac. vulneraria \$\mathre{H}üb., the type species.

### Tmetomorpha gen. nov.

Forewing: with costa roundly protuberant at base, incurved at middle; apex shortly prominent; hindmargin oblique ontwards and subcrenulate to vein 3, then incurved and shortly excised and oblique inwards to anal angle.

Hindwing: with hindmargin deeply excised between vein 3 and anal angle, yeins 3 and 4 ending in strong blunt teeth, 5 and 6 in smaller teeth.

Antennae simple in \$\foatin \text{; bipectinated in \$\delta\$; palpi quite short, porrect, blunt; tongue and frenulum present.

Neuration: forewing, cell half as long as wing; discocellular concave; first median at one-half; second at nine-tenths; radials normal; 7, 8 stalked; 9, 10, 11 coincident, anastomosing with 12; 12, 11, 10, separating at regular intervals, 9 subsequently anastomosing with 8 to form the arcole; hindwing with costal and subcostal approximated for half of cell; 7 before angle of cell; no radial; medians as in forewing.

Type: Tmetomorpha bitias Druce (Ennomos).

### 362. Erilophodes indistincta spec. nov.

Forewing: greyish olive, thickly covered with blackish speckling; the markings blackish, but very indistinct; first line from one-sixth of costa, oblique ontwards to submedian fold, then vertical to one-third of inner margin; outer line from three-fifths of costa, oblique ontwards to vein 4, then inwards and waved, to two-thirds of inner margin; submarginal line zigzag, much obscured below, bluish white and conspicuous at costa preceded by an irregular blackish shading, and followed also by blackish, except between veins 3 and 4, where there is a pale greenish grey patch; black marginal spots between veins; fringe olive fuscous, with pale streaks beyond the veins below the middle, between them above; cell-spot distinct, of black raised scales.

Hindwing: shining, whitish grey, with diffuse black marginal border; an interrupted black marginal line; veins with pale spots at their ends; fringe mottled dark and light.

Underside glossy white, speckled with black; black marginal borders, that on forewings reaching to one-third from apex along costa, with a white marginal patch in each below middle; cell-spots black.

Face and palpi fuscous slightly mixed with white; vertex, shoulders, and patagia grey; abdomen blackish above, whitish beneath; antennae blackish, the pectinations short and regular, the apical third simple; metathoracic tuft black.

Expanse of wings: 44 mm.

1 & from Onaca, Sta. Marta, June-August (Engelke).